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Geo. Mather

Lectures on the Materia Medica.

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No. 1.

Lect. 1st

The Materia Medica.

We come now to consid. of the subst. to be employ'd in med. — wh. have been call'd Materia Medica —

Indep. of necessary to employ food; and it not indifferent what substances we use for that purpose; and therefore it's absolly necessy to understand food as well as med. — These then are what we are to treat of —

The 1st thing we're to consid. is of ye hist. of of substances we make use of for food, or medicine

These are cont. subst. found either in the earth, sea, air — in animals or vegt. &c. wh. by appl. to ye body, produce in disease

The knowledge of these subst. consists in ye 1st place, to know how to find them; and indeed for this, it is suffic. to know they are cont. in a Druggist's shop; but this knowl. is not sufficient for ye science of med. for some Practit. at least ought to be acq. wh. their growth &c. especially as med. is a science wh. is not to be found all at once, but only by an increase quantity of obsrv. accumulated — Of late ye nat. hist. of med. has been much better than formerly — how. as this matter wh. cannot be trusted to memory it's well we have it recorded in books — M. Lewis [redacted] & Linnaeus have done a good deal this way —

To know med. we ought to know

[illegible]

[illegible] ever [illegible] to [illegible] would [illegible]
[illegible] him to write [illegible]
[illegible] of dis. for such definition as [illegible]
given — It is not probable he will
find out one, not meaning he was [illegible]
[illegible] in of mind of Pharaoh, do
because of variety of his appearance of
so great, of we must also consider
the whole history in order to be [illegible]
of them — We are therefore obliged to
endeavor to find out as far as we can
of what of alter. is [illegible] God
by of med. in order to cure of dis.
The only mischief is, of people have
supposed of they proved of effects pro-
duced when they did not — This
of if we apply caustic potash, or any
other part, it will destroy of part
will combine with it, forming
a soap — In this case Pharaoh of alter.
of remedy prov. but I find also
of if I employ mercury when the
morbid matter in the system —
Poetry of matter but has this in
effect I do not know — In these
cases a g. many conjectures have
been made by Galen & others of one
med. treated, & another cured, & so the
same thought of certain med. Physicians
& this Physician & the
many other respective

i) Therefore we cannot be able to state the effects of medicines unless we are able: it is better for we sh.d remain in ignorance, than suppose we are acquaint.d with what they actually are ———

6) Thus when we have apply.d the [illegible] with in the skin of a living body it dissolves [illegible] [illegible] the dead and [illegible] in a strong person than a weak one — The powers of the life of the body then have an effect [illegible] so simple a med.e — There are many experiments which have been made on this subject but were totally inapplicable — Have applied the Alcohol to the blood it will coag. the serum of the blood. We cannot then conclude from hence that the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the blood [illegible] enter the [illegible]

[illegible] in many cases of medicines
not know what effect med. produces
in case of dis. In such cases we must
act, imperfect as they are, be able
to consider only the gen. effects of the
med. by appl. in certain cases of
disease (as we come nearer to cases
how of effects of a med. might be
originally inherited) These
are the same of their effects may be
known by experiments on dead
bodies — We know for instance of juices
of inside of stomach will coagulate
milk — of caustic fixed vegetable alkali
will unite with oil, shine form
a soap — and so in many other
cases we can discover the properties
of a med. by experiments out of the body
We know of cases of poisons will [illegible]
and, though if there be one in
stomach we apply it — In these
cases hard we should by no means
make a conclusion too hastily for
effects of the body are such as have
a great resemblance in [illegible]
cases — Accordingly we do
not find any such great [illegible] of
bodies those who have drunk [illegible]
poisons. Rational as to prove fatal
in many cases it has not been by coagulating
blood — for it has been [illegible] calculated
death in such cases [illegible]
than — [illegible] alcohol caused a
[illegible] of [illegible]

The effects of all such acting on the living spirit of man have been generally merely accidental or originally — Indeed almost every thing of the kind that has come to light or shown by appl. to the human body — for whenever a Chemist has made a new discovery & found out of result of it made good for nothing else he called upon the world of Earth food &c! There was the same applr. about most other things & were all not hitherto — Accord. not only Bath — Magnesia & Epsom Salts but Colchicum — Red Mercury &c. — Thus it has happened of late years Opium &c have been investigated, & perhaps of many excellent ones need dormant & totally forgotten —

[illegible] great quantity of fluids — By
many med. effect of lifting power of
body — encrease of action of certain of
viscera, their action — decrease of
others to be affected — and in order
of action of various parts — We
cannot possibly take a picture of
any such med. — 2) — There is
of advantage in modern medical
history over that of ancients, of of disease
and such of a plant or animal
might probably be found out by the
Pts. is not by any means of ca
of ancient description, for we
are not sure of we know only
of plants or animals by those given
of the such as were employd in med
by ancients — We do not know
whether of Cyrenaica Pyrenaica
had rett — nor do we know of Egyptian
Pan had in their yards — What kind
of fowl of medicaper was the Chance
an idea — There are many pl
probably, perhaps pictures in Chance
in Dioscorides — When one of medical
Pany plant, or medicine, or in the
other in history, chemistry, or botany
we Chance on, we may make some
probable guess of instances of alt of
at of Cabinet closet — Natural
classification — for subst. of
[illegible]
[illegible]

a few remarks, no doubt of each
of the same class & plant possessed
of same virtues. For instance
for instance if umbelliferous
a very mat. class & plants but some
of them contain a strong smelling
equable to the stomach & act in
the same manner as species, such
universal chain in the whole system
such as carraway & coriander seeds
have certain aromatic juices, as
Sagebrush Asparagus Asparagus Anemone

[illegible] and
[illegible] Materia Medica by [illegible]
uniform [illegible] there is [illegible]
[illegible] in their action so all
[illegible] of Species of [illegible] [illegible]
[illegible] in chemical acid have the
[illegible] same powers but different in [illegible]
[illegible] would have them be a great
[illegible] in [illegible] [illegible] [illegible]
can much help conducte all [redacted] [illegible]
[illegible] same [illegible] [illegible] [illegible] to have
[illegible] same effects as med.s — Mercurius
in chemistry form a very natural
[illegible] — but [illegible] powers & effects of Mercury
antimony, & arsenic are very different
from one another — Our taste & smell
direct us in many cases to the
med.s It was common for [illegible]
employ chamomile to support
strength in intermitting fev.s —
[illegible] found of a lady in America
[illegible] giving chamomile flow.s but
[illegible] [illegible] washing & grinding it was
a little late of some kind made
[illegible] [illegible] [illegible] by of [illegible] means
[illegible] virtues of the med.s were discov.d
taste & smell cannot be mean.d
[illegible] depended on for but are many
med.s similar in their taste & smell
of having their virtues extremely
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [redacted] [illegible] [illegible] [illegible]

[illegible] well [illegible] a
[illegible] also to depend on them — All
of their effects & remed. are so lie
only in appearance — Fuel & [illegible]
may indeed of. was attempted years
little time ago; but wh. does not seem
to have succeeded [illegible] Prepa-
tion [redacted] so much of a med. as [redacted]
instinct to poison himself — so probable
thought of poison wd. whisper in his
ear, what it was good for — [illegible] la
of countrym, & many other subtl. of
of same kind were tried in this way
to see if their pictures wd. not be [illegible]
Gram. of Spirit of a med. has in a
healthy body, one can hardly bind on
what effects it wd. prod. in Dis. — The
person for instance wd. [illegible] the Pa-
wd. err in omitting God, by
giving it to a man in health
in of. other case it wd. prod. no [illegible]
the given in consid. quan. for other
length of time — The only made the
investigation of effect of a med. is to
amply it in a phrenzied body — because
tell indeed what it will prove if will prove an
omit, but not what effect it will
have on of. body [illegible] or [illegible]
effects it wd. prod. in disease

a manner of affecting the —

Lecture 2d.

Of the Application of Medicines & their Effects.

When shewn the subtl. whose int. we were to inquire into, we such as are suff. for food in the that of inment. we were to inquire into the nat. history of the man of procuring them, & how we be able to discriminate the one from other subtl. and to know when they were in the nat. state of perfection, & the manner in wh they sh. be prepar'd.

Food is necessary equally in dis. as well as in health, shewn in many dis. Pat. will be fed in these. By a scan. of the chanel; that then the food must not be alt. in the short time of Ch. for exist. in digestion, it requires a moment. It must therefore be such as in qual. & quantity as the stom. can manage.

Medicine equally for the cure of dis. but dis. are very diff. in their nature. The body is a subtle body, & medicine is a subtle body, will be reach the nat. or dis. state of the body. We have shewn that the body might be affected in many ways in the spec. of the state of the body

of Medicine — Section of the
Food & medicinal Properties of
the vegetables of Florida & their
medicinal Prop^s — or remarks on the
action of the most powerful
Plants been read & spec^d, but
we did take of authors & mentd
in this list — What is said of the
Dan^s to know of diff^t of Fevers
& state of the body when dis^d, or of
what is med^e & repeated but
but this is not necessary as long as
we know of med^e applicable
cure of disease — Practitioners
constantly divided into
factions on this head, each of wh
have been men of cons^d
eminence — Many of
them have erred & set
in injury & disease, if we
cannot well say for our
experiments, wh ought to be
effect — Wh^t has misled the
Pract^rs have cons^d of
the med^l head, for to the
effect of alte — of chemical
Ph^s as Bacchanal enthusiasts
remove to attent when there
were none at all — Wh^n
of offer hand Empirics have
cons^d in each one of

[illegible] of the history of the dis. here
it has been said is good in an
infusion but it may be given
so as to have a contrary effect, by
increase of dis. or even wt
of the Craft
It has shewn in such cases the
same powers of effect produced
by what it cures of dis.
Altho' in the prest. state of the solids
& fluids of the body one might
expect to make accurate
matters by making open. out
of body — and in some indeed
we are — there are yet
a great many fallacies attend
this mode of examination —
for 1st med. have a power
when added in the living body, of
altering their action from what it
wd be in a dead one — in
the 2d fluids & solids undergo
cons. alter. after death as for
instance the muscles of the coag. of the
gross solid after death — so that
we must be very cautious
in such experiments — hastily
— It has been thought that because citric
acid wd preserve a piece of meat from
dead animal matter, it wd do the same
and so of bark

Such medicines seems to have been acquired by mere accident; and we are frequently obliged to employ new med. from their analogy. The more we know of the use of a med. has a similar taste or smell it has then similar effects to others w.h. have of same taste or smell as for instance Cin. Rad. & Chamomile but this is extremely fallacious for squills & aloës are both bitter & yet very diff. in their effects for Cin. Rad.

Another method of employing med. from analogy is from Natural their classes but the many forms very nat. classes. They are very diff. in their effects as for instance of umbellif. plants forming very nat. class but are far from having of same effects.

Some have concluded that of effects of med. were for giving health - but we can have no idea by experience a man in health that it will cure of venereal disease. The way of knowing of effect of med. is to attempt by employing in dis.

Med. produce a effect some action of solids or fl. when taken

structure of the body — Mus on
the action of the moving power —

Lecture 3d: Of the Classes of Medicines.

In the 1st place we must find out the bodies such substances as are capable of being digested —

The solids are capable of ~~[illegible]~~ and corrugated — Subst. which produce these effects have been called astringents and the opposite class which soften subst. emollients

Subst. which thin the bl. by increasing the quantity of the serous part of it, are called attenuants and those which render the bl. thicker by encreasing the quantity of the gross part of it have been called inspissantia. Those which are called demulcents. Those which remove putrefaction are antiseptics

The medicines which produce action are 1st such as put in motion a more powerful power of nature — not such as increase the action of a part already in motion. These are stimulantia — or we may bring a more powerful power to act, & diminish the action. This class is called sedativa —

Med. may be some of parts have been found antiseptics

Mus. which diminish the force of the

There are certain med.
which act upon the whole syst. of the
body, or upon a part of it.
These we call Roborantia.
There are other med. which
diminish the strength, or power
of action — which are anti-phlogistic
Some act upon the body in more gen-
eral & sporadic way, & apply. When
it is more generally acting upon
we say it is more virulent
than lip; lip is irrit.
There are med. which make
it less irritable — which med.
irritabilia? incitantia —
There are a set of med. which
take off all preternat. action
which we call anti-spasmodics
and another set which have a
complex action on the body
one part of which is to produce
sleep which we call narcotics
All these different classes of med. are
alterative with regard to some
effect by accident — & they
have been called alterants.
There are some of specific
effect, prod. no ch. are called
evacuantia — The evacuants
called exact. cathartics — but
we now confine them to the
~~intestines~~ ~~and~~ parts

A d. mass be made from
d. g. d. of d. head we call 'em
cephalica — from those of d. mouth
sialagoga — from those of d. breast,
expectorantia —

Med. good for d. head have
been call'd cephalic — for d. heart
alexipharmic & for d. breast
pectorals — but this last has
justly been rejected

Med. w. make d. particular
motion act up strongly & dim. d.
sens. are call'd astringentia —

Med. and d. peristalt. motion
so to diminish a large
mass have been call'd cathartic
& purgantia & when they are
acted ~~very~~ very gently — lenantia

Med. product a large wat.
from d. Med. have been
name'd diuretica — We
have not d. means of
one d. secret. by d. insensible
perspir. but we can force
d. matter past d. blt. thro
d. pores of d. skin — When
this is done in a great
deg. they are call'd diaphoretic
& in a lesser deg. diaporetica

Section 4th: Of Food & Milk

Part of the [illegible] of [illegible]
and it is merely [illegible] of food [illegible]
forced in their place. [illegible]
which change also [illegible]
[illegible] — many difficulties
but is free of [illegible]

The body (or principle) after [illegible]
only changing [illegible]
in a cultivated state but [illegible]
[illegible] Hence the [illegible]
of [illegible] instinct should be [illegible]
[illegible] deviate all their [illegible]
their economy — which [illegible]
[illegible] great powers of [illegible]
[illegible] in consequence of [illegible]
[illegible] should take a [illegible] from
any other [illegible] subject
[illegible] Dr. L. finds [illegible]
[illegible] interests.

There are [illegible] cases in which
a special food is required for [illegible]
[illegible] infant, where [illegible]
[illegible] great [illegible]
[illegible] period
of any other food [illegible]
[illegible] be [illegible] of [illegible]
[illegible] course.

The 1st thing is, [illegible]
of milk, [illegible] is not a [illegible]
[illegible] but difficult [illegible]
There are [illegible]
[illegible] rises to the [illegible]
[illegible]
[illegible]

(a) in the ~~[illegible]~~ other nourishment:

(b) one part of the milk milk
given for nourishment

[illegible] of [illegible] and
[illegible] of [illegible] for a
[illegible] of [illegible] the [illegible]
[illegible] will afford considerable
that sugar is also a luxurious [illegible]
for many nations living on
grapes, dates &c. which [illegible] a large
[illegible] of sugar (a) while the [illegible]
[illegible] are [illegible] [illegible] Hence
an idea has been taken up that
only [illegible] was necessary for [illegible]
but this is a wrong opinion. [illegible]
[illegible] (4)
[illegible] is absorbed by [illegible]
[illegible] in [illegible] with the [illegible]
[illegible] of [illegible] and
[illegible] no change in [illegible] [illegible]
but there is a [illegible]
[illegible] [illegible]
[illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] 100 ounces of [illegible]

[illegible] [illegible] [illegible]
[illegible] it will be [illegible] They afford
[illegible], but [illegible] of [illegible]
[illegible] [illegible] of sugar,
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

with [illegible] their [illegible] quantity according to their [illegible] [illegible] [illegible]

[illegible] — The [illegible] Passenger [illegible] contains a Collection of Pigeon [illegible] field

6 Note in [illegible] [illegible]

[illegible] cases, &c.

Off. The woman's milk is
in cases generally of a clear
[illegible] and
[illegible] of [illegible] oil
[illegible] approach nearest to
[illegible] of women [illegible] these
[illegible] [illegible]
a larger proportion of mucilage & expressed oil than
that of the [illegible] cows.

Sugar is prod. in small [illegible]
[illegible] Food be made [illegible]
[illegible] ~~acceptable~~ [illegible] [illegible]
will be smaller than [illegible]
smaller when [illegible]
is in medicine [illegible]
its diff. [illegible] What is to [illegible]
[illegible] a few years
then [illegible] to [illegible]
[illegible] milk in [illegible]
digestion from [illegible] It does
often happen [illegible]
[illegible] for food [illegible]
[illegible] so large a quantity
of salts, or to [illegible] salts and the
[illegible] contained in [illegible]
[illegible] in [illegible]
which [illegible] milk is [illegible]
acid even in [illegible]
[illegible] food [illegible]
[illegible]; for even a sudden [illegible]
has been [illegible] to turn [illegible] milk
into [illegible] acid, [illegible] [illegible]
[illegible] [illegible] to large [illegible]
[illegible] matter [illegible]

a consisting of a radicle & plumule.

Lecture 5th — Of Vegetables.

The veg. subst. consist for the 1st farinaceous matter, as barley, oats, potatoes & some other roots — 2d fibrous matter, as green grass, seneca &c. — That Gum Arab. is capable of giving nourishment is proved from people having lived on it several months in the deserts of Arabia, and destitute of other food. Next fruits, which consist chiefly of expressed oil & sugar. Native veg. acids too, it is plain are capable of being digested, for it forms a digestion of food in the stomach. Animal veg. matter is the food of man, and from it he derives means as well as food for the necessary cultivation to produce it in a country. The 1st class of plants we procure this farinaceous matter, ~~the~~ farinaceous ~~the~~ ~~inside~~

The graminea have seeds with husk, one cotyledon & an embryo — the embryo begins to grow, when it begins to grow pushes out the radicle, which is the cotyledon & pushes into the ground, the other part is which is the beginning of the stem.

(a) and as soon as the branches of the spread of the root (from which of lateral ones spring) dies.

(b) which in proportion the ground most hardly tye will so much & will still less than of the

often of young plants rise above
ground for it does by one stem
there forms a knot on of them
a little above where it arose from of
from this lateral branches, each of
which further out roots ~~[illegible]~~
called tillering then of the
up above ground appears stem from
a flower is generated — these flow
have generally 3 or 4 stamens, and
in general of plants is perfect
but each has its stalk male or female
parts only

The grains are such as have
seeds of course. Oats — barley, wheat, rye
barley, oats, rice & millet — these
have never been found growing
wild. Bread then is by no means
of nat. food of man, but it be
of which is his principal support
the general matter of these I say
is of prin. food of mankind
in warm countries, where
there is moisture at of warm
time, rice holds chiefly
in China, in Indostan, & of
in particular forms of food
grain of ~~[illegible]~~ rice, for
is a great plant of ground of
hundred miles, & is on the
large rivers, and the rice
was in boat. In dry

6 and a great part of America.

Europe, wheat is the grain
that chiefly been cultivated
in northern climes where the
whole surface of the earth is covered
with ice & snow during the whole
winter, vegetation is entirely stopped
Ice does not grow well on any
but a moist soil

In Africa the prin. grain is
wheat & Indian corn

The fertilizing matter of the
seeds of gramina is solid in
the shell of the atmosphere. Its esp.
of being combined with water, but with
the fatty * forms a very adhesive
solution so as to adhere to the
internal surface of the stomach,
occas. great disorder during the
digestion. When the seeds are
sown & reap. corn we have
not prepared a proper kind of food.
It is coagulated by heat. It must
be coagulated before it is
compl. for food. The ferment. coag.
it by a moderate heat. It
is also capable of fermentation. We
take it in the form in which
the seeds grow, & merely reduce
it so as to cook it. When dry
it is very difficult of digestion
does not readily combine with
water. The powder of the
seeds after it is made

W. & Ptcn cong. It

coag. it, it forms a hard mass
w. does not easily admit of
gastric juice in the st., in the stom.
for this reason, was formerly
it w. past. w. renders it easy
digestible — There are some
things w. assist its digestion, as
alum &c. — Dry if the quantity of
this is not large it renders
the bread more easily digest.
by acts. to more perfect coagul.;
the bread is cut into slices, and
again coag. by heat, it is
recommended as easier digestible
This is call'd panis sicciatus
or zwiback

Bread in consequ. of its porosity
not only absorbs the fl. of the
stom. so as to be easily penetrated by
them but also absorbs & retains other
fluids. That thin wine could not be coagul.
so as to be retained in the stomach
will digested — for any subst. that is thrown
into the stom. in a fl. form, if it
not retained by some method, hardly
affords nourishment — We often see
expressed oil, w. frequently it forms
w. water an adhesive solution —
interposing in the interst. the particles, so
they will not adhere — Farinaceous
matter seems, though the expressed oil also
in the stom. to be digested — Farinaceous
matter formed into bread is easy of
digestion, and seems well adapted for
the use of the st.

a/ a cherries

Dr. Cullen ascribes their poisonous effects to their prussic acid — &c.

2. Apples pears or almost any fruit treated in this manner may be rendered considered of nutritious

The nutritive, or eatable substances employed for food are fruits — which contain in a small space, sugar, which affords animal nourishment — they contain also mucilage and acid, which is eatable & digestion as an feinder correct the putrescency of animal food, which a pure acid which is not eatable of itself into the stomach by itself, will not do — fruits contain a mucilaginous substance which easily falls into fermentation & putrefaction, which, when are the cause of putrid & acrescent humours. The juices of fruits contain a strong matter, generally of a red color, but which is seldom seen concealed other in some it is — this is sugar, comp. in of fruit, which prod. by fermentation & putrefaction. Those which most abounds in fruits have constituted the chief food in some countries, as grapes & dates have been sufficient for the support — figs which in Greece, are prep. in the island of Grapes in some provinces, of Spain, Portugal & the countries of Dates in some parts of Africa — Between the tropics, water, the fruits in a moderate degree of heat, of disposition in general to ferment, is carried in the fermentation of dried fruits are much

[illegible] are
more concentrated in one menstr
is contained in the ~~latter~~ former
We can take the distribution to accr
actually in fruit by adding a
quantity of sugar & reducing the solid
sugar more considerable — Fruit
of a acid & aperient are sometimes
effects of some purgative and these
have been conceived to occasion
especially in fruits in autumn
Made in temperate climates during
the autumnal season frequently
accidents appear to take place, and
as fruit is very much used at that
time, it was supposed the cause of
them accordingly the use of fruit
has been condemned by many
traditions. It seems however
a very irrational conclusion
that fruit purgates them as a food
is thence that it shd be prod in
such quant & so much eat by
people & more in vail, that
mankind, where instinct may be
the principal guide. Besides
if fruit acts as purgative we are
to consider it as acting like other
and if so, when thrown into the
stom. it wd purge & continue doing
so till evacuated, when it wd cease
for jalap, Glauber's salt &c. act in
this manner & why shd fr

[illegible] have [illegible] title or no [illegible]
[illegible] as well as those who have [illegible]
[illegible] of the [illegible]

if it had a temperature, it must act
in a different manner from the
surrounding air, & be a cause
of wind & rain. It is not
hereby conceived that a similar
medium is proper for the
fact is that such autumnal hurricanes
take place in Peoples (a) and other
of seasons is very common long
we are wont to have a great number
of serene days in the autumn —
whether fruit is in plenty or not. While
on the other hand when of summer
is hot & cold, hardly any serene
days make their appearance —
Tho' there be a great many of fruit and
that ill-prepared — Therefore there
autumnal hurricanes by no means are
for fruit but for this cause — when
of air is rarefied constantly, there
an encrease of external circulation
and as the act. of heat of the blood
is circulated — the interior heat of
of body the vessels of the viscera are
left empty & acquire a great degree
of contraction and of the value from
the rarefaction in the autumn and
of weather be of sensible, and
are sudden & frequent to cold, the interior
vessels are contracted & the blood's less
thrown on the interior part, as the
adventitious increase by cold
are stimulated — the vicious repel
come of the way, there is a great

a Fruits not only afford nourishment but are useful & agreeable to correct the putrescency of animal food — Thus some Cabbages, & more fruits have been thought intoxicate directly contrary to the natural instinct of Mankind, which are the cucumbers & cucumbers — melons & pears — for Prunes & Currants for Pears & Peaches — Pickings & Preserves — now fruit shortens so much of late as to produce similar cutaneous eruptions ——

[illegible]

That animals [illegible] contain

[illegible] wine & [illegible] animal

sufficient for the [illegible]

in the vessels [illegible] be [illegible]

things will be glued together [illegible]

[illegible] in force [illegible]

[illegible] Milk [illegible]

[illegible] ferment

[illegible] Milk [illegible]

vegetables — [illegible] that [illegible]

cucumber has been [illegible]

[illegible]

[illegible] 3 or 2 days [illegible] Tartar-

-[illegible] —

Vegetables [illegible]

Lect. [illegible]

The next class of subst. we are to treat of are Vegetables — There are certain plants which naturally are useful for food, but which Mankind have rendered of more use by cultivation. We do not propose [illegible] but have been employed chiefly to correct the putresc[illegible] of animal food. Plants contain the farina or mucilage matter which runs more readily into ferment. & [illegible] ~~[illegible]~~ [illegible] are also found in them. That the mucilaginous matter [illegible] it is necessary the ferment is [illegible] the juice of [illegible] with sugar [illegible]

a Pot of mufh plant by cuttings Plants
grow in the Earth and derive their
particular juices & produce, in return
and leave the remainder — Lastly
Rain & Dews, which to be afford
to the air & therefore have their
and juices deposed — Plants
equal relative remain in their
pots, so that bow cultivated, will be
produce in a seed a disposition to generate
plants, & medicinal juices of the same kind
when — If it be cultivated
in the Pot — these attributes
& medicinal juices more fixed
& rare —

[illegible] of sugar of [illegible] contains
a [illegible] Prelim in similar circumst.
of juice of plant called [illegible] and
[illegible] solution of pure soda will [illegible]
[illegible] a deposit [illegible] of mucilage
[illegible] in quiet [illegible] of solution of [illegible]
to induce fermentation — Besides, these
juices which are contained in cacti
[illegible] in all climates, there are
[illegible] also medicated juices — which
[illegible] are effect per [illegible] leaves —
On cultivat. we have to begin their and
[illegible] juices have only their mucilage
matter & sugar — In the 1st place
these plants shot up their stems
immediately from ground [illegible]
[illegible] the mucilage matter & sugar and frequently any medicated juice —
[illegible] sometimes in high [illegible]
as they are shooting out of the ground
as Dandelion — rhubarb & others with
[illegible] cultivat. — In 2d place they are
a plant of great luxuriancy & [illegible]
to medicated qualities — and [illegible]
[illegible] mass of seeds of plants grown
in very rich soils depending [illegible]
[illegible] & improved luxuriant & [illegible]
particular
[illegible] juices more & more [illegible]
[illegible] — Hence [illegible] the [illegible]
in cultivation consist of [illegible] lead
[illegible] days [illegible] [illegible]
[illegible] & journey [illegible]

of the different species of allium all naturally containing essential oil, which is diminished in quantity by cultivation besides this essential oil is so volatile, that it evaporates on boiling or exposing them to the air and the effect remains only the bland mucilage of roots & seeds which also can very readily into fermentation & renders them likewise very proper to be employed for correcting & preserving animal food —

Plants with compound flowers or of the genus Lactuca (Linnaeus lettuce endive &c.) naturally contain a quantity of a specific juice, which is of a white colour, of a flavor like the plant & very bitter — the taste rendering of plants perfectly incapable of being used for nourishment but the remaining thousands in a rich vail this specific juice is detained especially nothing (from cabbage —

These naturally contain a bitter
juice & are very stimulating, prevented
by it. If we were to take them, we
then would be totally unfit for food
but by their having low, yet to be
found in rich soils, they have lost
the bitter juice also — & as they are naturally
exceedingly apt to run into fermentation
& as this is encouraged by their
cultivation, from forgiving a fresh
vegetable fermentation, & spirit & consequently
deputrescency of animal food.
Making of plants grown in dark
by covering them with any opaque
substance, will not only deprive
them of medicated juices, but also their
colouring oxides, so that by this means
they become white.

Umbelliferous plants of the natural order
a country, quantity of spirituous, may
have their juices destroyed also, & in
rendered fit for nutriment by many
means, & so in the north — & by
mixing with yellow, parsley &c. are
treated in this manner.

Beets & other plants of that class &c
have been called naginales, also with
a very bitter juice which renders them
naturally totally unfit for food.
They have been cultivated in rich soils
in hot climates, & have lost
the bitter, & are taken in young
shoots — We are to consider

a. It is difficult in this country, and has not the effect, but by a much higher degree of cultivation to procure a annual food, usually yield'd, and indeed even still the principal part of it. and it is made use of in many parts of England is known in Salt as bacon for instance —

b. It is the same, and of equal use, readily into fermentation according as it is allowed more or less with this, they are more or less fitted to correct putrescency or afford nourishment.

C 2

also the leguminous (or) bean kind, such as
peas, beans & French beans,
before farinaceous matters formed
in other words, of this class — that it
is necessary if we employ animal food
to cultivate vegetables such as we
have recited only, in this climate of
ours is very certain — that if we
were to make use of animal food
recently killed, it might be necessary to
employ cultivation to procure these results
as we have now enumerated, as
when cultivation was not carried to
great length, & salted meat was a
principal food, & there were no
kitchen-gardens in England prior
any cultivation of this class of plants we
are mentioned of sea-scurvy was
a very frequent disease — this was of course
about 300 or 400 years ago — this
was about 200 years since we had
first kitchen-gardens in this island.
These plants are plants which naturally
are in order to be employed for
food, but which are rendered susceptible
cultivation — & which are necessary to correct
of putrescency of animal food when
of we use it, salted —
The last class of plants consists of
esculent roots — these contain sugar,
farinaceous matter & mucilaginous juices.
The roots of of chadgnamela, asparagus
red, beet &c. & those of of [illegible] as many
contain principally mucilaginous matter
& some gum & sugar — so of

A Dutch miser who had tryd all
kinds of food to furnish wch he could live
on, yet the cheapest found cannot answ.
Mr. Jan Rose the best, as his food
for a whole year cost only 5/6 !!!

do not afford much nourishment but are very proper to correct the putrescency of animal food — The roots of umbelliferous plants, have then a larger quantity of sugar as carrots, parsnips &c. — They have also a considd. quantity of farinaceous matter so as to afford very great nourishment and for the sence cultivatn. of greatest of any kind of food. We may reckon amongst the roots of umbelliferous plants, the tuberous roots of flowers of the ~~[illegible]~~ of the principally artichokes — but many others, altho' we do not employ them have of same qualities — These are all among the most nourishing vegetables for cattle & consid. quantity of farinaceous matter — Also yams, plantain roots & sweet potatoes, wth. much of various other roots of contain a large proportn. of farinaceous matter, wth. a small quantity of sugar — These are employd in many countries as the principal part of food. Potatoes, wn. we see observed a deal of farinaceous matter almost pure, are capable of yielding great nourishment. All these roots tho' are more flatulent & accescent than farinaceous matter produced from seeds of grasses as potatoes are considd. [illegible] so — These are the best of the [illegible]

we can pay for food, except the fungi — whether of fungi are animal or vegetable has been disputed in natural history, and is by no means yet determined. But whatever fungi are among natural historians, certainly are good they profess of equal of animal food properly — in this respect they are not to be considered as vegetables —

(The Society Demphlogisticated Lett. 7th) Animal Food.

The 1st question is, whether we ought to destroy other animals when man can live on vegetable alone most undoubtedly. There are animals such as can only live on animal food, and to whom instinct points out, or in other words of rule of conduct which is given them by the author of Nature points out to them that they must destroy other animals as gives them powers for such destruction — But in man who can live entirely on vegetable food, which nature has given power of destroying animals it seems at 1st sight, to be a want of humanity to take away the lives of other animals to convert them into food

Now if we consider this earth all means are taken to fill it with life and one animal being food for another, is so far from diminishing this life, that it increases it very much? — In ye first place, ye number of animals & ye capacity of their propagation is immense — A cod-fish for instance lays 3,000,000 of eggs at once. If these were to grow up, & remain at ye state, ~~& their~~ posterity, ye sea in a very short time wd be covered with this species of fish alone — but the animals, yt are not productive, one single man is sufficient for instance wd produce a sufficient posterity in 10 years to fill this island, were if they were to stand as thick as it was possible to place them — And so in regard to all other animals, there is a power of production capable of making amends for almost any waste. The no. of men is limited then not by their power of production but by the means of their subsistence. Now by one animal or vegetable as food for another ye means of subsistence is increased in animal life generally — Man finds subsistence for more animals than he can employ for food, instead of being [illegible]

also a lion, dog &c —

lap cat a cow &c —

The Sheep, or organized, wd. be
naturally produced in this country
wd. not yield half so much as actually
exists if the ground was not
cultivated for them — If provisions
were not fit for them in the winter
many wd. be destroyed; and if they
were not defended by man from the
animals — If for they as humanity
dictates it is not in proper for man
to employ and feed ——

The next question is, whether man
may employ animals for his
pleasure in point of property

(a)

(a) eng

[illegible]

No. In Iceland during the winter they feed their cows with fish — This is remark'd as it is contrary to the nat. instinct — tho' indeed it is nearly the same as our teaching dogs to eat bread.

[illegible]

[illegible] (a) [illegible]

[illegible]

Lecture 7th

Differences betwn Animal & Vegetable Food.

[illegible]

[illegible] the quantity of food
and fluids [illegible] is
greatly proportion to the [illegible]
[illegible] of [illegible] animals
[illegible] be employed for food &
of [illegible] &c. be disposed to
[illegible] the quantity of food
[illegible] blood be larger, of fluids more
and severely [illegible] and
[illegible] greater [illegible]

Dig. other hand, if the pest is not all
disposed to contract, when there is
more energy the of the spirits
more easily than when there is a
larger quantity of food & consequently
for there occasion a vitiated food, having
a strength from the other a vitiated
[illegible] for corporeal & negl. for mental labor
[illegible] good skin & much more
than negl. or coarse digested
[illegible] of the opinion more difficult
than on food, for the stomach of [illegible]
and whole are negl. [illegible]
multiplied to 4 or 5 & of intestines
is longer but in more [illegible]
and [illegible] of stomach & intestines
are shorter in birds there is so
much greater expansion for the
digestion of food

The single cont. in the
larger quantity of water than of
blood & the [illegible] of the consequence
of single [illegible] blood of [illegible]
is [illegible] [illegible]
[illegible] of [illegible]

quency & perfection, yet
as it stands now, yet dividing
4 species more than ever. 2
thus is important in many
diseases

almost all those fatal sing
have treated of more & less
of their ideas with regard to
it, in a totally different light from what
we now see to be. I suspect one
a man disposed to detract from science
attributing a wonderful thing to
chance, & suffering it to be a
favorite of fortune. Thus philosophers
use as a shamefaced principle & indolent
a supposition. Mahomet Pasha &c. &c. &c.
we see fire has been introduced in
light, & still continued amongst many
of our ancestors in Siberia
& Mary Stone Fraunhofer
letter to give one sort of
Oriental pearl. In Malta were
observed there are 3 hundred
kinds of fishes — In and about
are more than one species
there's also a difference in varieties
one species of insects on one
thing, & another in another
as one is more accessible
another more pitches &c. &c.
one is corrected by the
other, & mutual corrections
tho' variety are fit in several
ways & of the imagination to call to
much — the certainly it is not
to be such large quantities of

food or use do for the feeble
of when of Spaniards were
of among of Indians in America,
they were allowed 4 times as much
food as the latter in proportion

A quantity of fat is constantly deposited
in the cellular membrane in most
animals but in a less quantity in man
in consequence of some unknown
cause. They at ultimately into water
and Phosphorus — now when fat
are Phosphorus, of constituents of
Phosphorus of a quantity of superfluous water,
scurvy, great melancholy &c
in hectic fever, we find of a
large quantity of the green of
of bile, of style is flow of life of
blood of whole system is dim

Lecture 9th Of Animal Food.

Animal mucilages may be divided
into 2 kinds, solid when unmixed with
water, & fluid when combined with it —

The solids part are almost all
fibrous — They differ from one
another at according to of size — the
have fibres, presents fewer surfaces
to of gastric juice & hence of beef
more easily digested than mutton
in of most of quantity of fat
mostly between their fibres
vessels in consequence of largest quantity of fluid
between their fibres are more easily digested
The facility of digestion is proportional
of of equal coagulum solid
than of mucilage

easily dissolved — Some gums are
much sooner dissolved in water
than others and that fluid is of
most easily dissolved in the stomach is
course, more easy digested — It has
been to be observed of solution that
fluids much more readily in the stomach
than out of it in the same degree
of heat — It is the ferment that takes
place in the stomach that dissolves it — So
of this ferment does not go out
and digested, but leaves putrid substances
apt to run into one ferment
are very apt to run into another
also — such of them as is apt to putrify
easily ~~[illegible]~~ enters into fermentation &
consequently soon digested in the stomach
the last fluid could an food is in
itself much more varied, & therefore
much more to any substance than
others — The meat of young animals
is much more varied, than that of old
ones — and some of them forms a more
gelatinous varied solution than
others — All animal food is more
easily digested than vegetable food
Broad of definition — Shell fish,
oysters, lobsters &c are of this kind
& have been found such more
denying digestion as to require
one fifth of 2 hours sometimes
to digest, & yet at the
same time sometimes &c

symptoms of poison. In general it has been said of poison was taken in substances that oysters had been eaten or copperas &c. — but there is no possible, for if blue vitriol be given, it will not produce the effects of nausea — but only violent vomiting & purging — a cutaneous eruption only accompanies these symptoms.

Food which contains a large quantity of essential oil which is indicated by its high flavor, is also difficult digestion — It will be seen well digested by strong stomachs but not by weak ones — These are the defects in American food, which prevent its being more rapid to explain.

Lecture 8th Animal Food cont.

Animal food is seldom made use of without preparation — When first taken into the stomach dissolved into a crude form, it gives very little nourishment to the system — If stomach be broken down into other solid substances — but if it be reduced to fluid, it is converted into juice of the stomach, which is nearly the same before & forms a good

la Fauve &c.

hard out of the very hard of the horse
& the Muscle & the flesh of man & blood
for instance gaining a little & exhaust
oil ——— The gastric juice
only the coagul. of the lent of solids also
& the Muscle & the coagul. an. solids before
we throw them into the stom. ———
We coagulate it ~~by~~ very, & dow. it
leave it to coagul. & heat it
down entirely ~~& the~~ coagul. it
by heat as by roasting before it, we
the juices are by this means better
retained — but more of flavor &
exhaust. oil is heightened & enjoyment
is added thereon — Such an food as
is not high flavored ~~as~~ is
best roasted — or it may be boiled,
~~but~~ the juices are less retained in
the latter way — but if open oil is
dissipated ——— We know also
that an food by exhaust it to heat
in oil (which we call frying) which also
adds flavor & enjoyment, which food
food very improper in diet —
There are of methods by which we
prepare a good food —
The an. foods which are easiest
digested are among quadrupeds
the sheep & hogs — The com. quadrupeds
are unlike these, as beef, pork &
venison are more difficult
to digest — ~~are~~ are harder to digest
than of fish & as beef, mutton &c —
of birds of all classes of game &
chickens are of the easiest to digest —

as common fowls — turkeys
geese, partridges

Of fish such as are neither too
solid nor too flabby & are white
& do not abound in spent oil
as whitings, flounders &c —

All insects & reptiles are of
difficult digestion —

Milk & cheese are of subst. use
as food for young children — but quite
unfit for adults — but quite
indigestible & form within themselves no
digestion, which have themselves no
digestion, which we call
condiments — but of these to-morrow.

Of Condiments.

Since the digest. depends upon the
action of the stomach & the intestines
& the secretions & secretions, on
peristaltic frequent. — Stimulants
increase the action of the stomach, increase
the pains of digestion — There are
specially 4 classes employed for this
purpose — The 1st class consists of
aromatics or spices — They do not belong
to any nat. class of plants — They
grow in a warm climate & the
climate is a cold one — The
stomach is languid — As in
warm climates, the relaxation
is considerable, stimulants ought to be
used; and strength, they are very
proper —

No. 2. Dep consists of the hydrogenia
alibata — of fermented, such as
horseradish &c — of bitter garden
onions &c. They are not inflam
& are therefore better to be used in
old than warm climates. They
will not grow in warm climates
or at best never come to perfection

There, another interesting dep
sh. is 1st of hydrogenia of tomatoes
asparagus &c — of 2. fermented sides &c
Stimulates of stom. tends to make
it after of a th. of shine and
therefore they ought to be used —
except when P. cannot be
digested with ease — If had too
long & greatly of on it. If very
hard digestible & better to employ
an, as they produce dep smelling
than of indigestible food

The next dep. is to Gorrs. digest
are acids like any fine sweet
acid — Acids dim. of bl. & stoge
are to acid. & great. overdep. of
gastric juice — A few drops of vit
acid taken before of prin. meal
will then prod. an appetite
If P. be taken out of doors at
there's no appetite, it should
be digested and therefore in the
cases we may use acids — Acids
also take off any disagreeable
taste &c

Acids may be powerful [illegible]
[illegible] in food as Vinegar
[illegible] acids and the
acids must [illegible] rather
tend to make the [illegible] more readily [illegible]
acids have also been [illegible]
[illegible] of food
hence we use [illegible] in the shell fish
of food of young animals [illegible]
[illegible] Lambs &c.

Sept. 19th. Condiments cont.

Mineral substances in salt — he shall
mention salt as an advantageous
in the diet, we do not believe
[illegible] support that we
give use — but it certainly has some
effect, because it is the practice universally
with all Mankind to employ
it, where it can be procured — and
even some Nations [illegible]
[illegible] a sufficient supply [illegible] to obtain
salt from the sea or salt springs, [illegible]
[illegible] of the sea at [illegible]
[illegible] salt springs with their food [illegible]
[illegible] practice of using it, because
[illegible] are [illegible]
[illegible] by salt [illegible]
[illegible] — [illegible]
[illegible] vegetable [illegible] is [illegible]
[illegible] difficult digestion, [illegible]

[illegible] naturalis [illegible]
[illegible] quo de [illegible] same effect

apt to produce putrefaction of the fluids, from recent animal food.

Naturally men use salt, but also often animals and animal oils, and salt water are found to be very palatable. In some countries, it is practice to give animals salt with their food. They are fond of them, will even lick a certain quantity by itself. These are substances which do not afford nourishment themselves but are conducive to digestion.

Dogs, birds, afford nourishment in themselves if proper mixed with food. They seem to take it in a wholesome, or perhaps more but and also of giving animals a fresh gain. (a)

Sugar has been employed to take flatulency, because a more concentrated solution of sugar is liquefied to the flatulent stomach and bowels. It has therefore been given with, or have had in premedium a sufficient quantity of sugar. Sugar also tends to check the putrescency of animal food. These are the substances and make use of to promote digestion.

Substances are employed for drinking water in the prime food. Giving to food effect in the system. In place however as a medium for the food, in the [illegible]

of saline & putrescent substances
of the organs — Water of Doctor
Priestley and who has lately
supposedly an of subject to consid-
erable water as the most proper sub-
stance for people to drink but it contains
not the most proper for either of
these purposes — ~~It ought to be~~
~~employed to~~ The fluids are natural
applied to act as menstrua for of
food, are by no means pure water
but have all a certain degree of
viscidity in them. Saliva has
a very considerable viscidity — &
a very considerable quantity of
gastric juice also contains a
quantity of mucilaginous matter. This
was ~~very~~ necessary of. They must
be ~~retain~~ d somewhat in the
stomach & be carried from
food. Mucilaginous matter dissolves
in water, forms a very proper vehicle
for this purpose

Wash wines tend to forward the
fermentation of food. Red wine
serves also as a stimulant to the
digestive organs itself to a greater degree
Wines therefore much in such quantities
not to produce any degree of intoxication
forward digestion — & are proper
for people employed as menstrua for
food than pure water. It is
happen that unfortunately there are

1a) If a large quan.t of Water could be drawn off it is often necessary by the Laws of Hydrostatics only the sidewings may nearly as Bare as it was Observed in

b) It is just the same as cast.t of the fluids

N.B. In this case the Objection of stability alone is thought, & the pa.t is exploded it will be

Turn over

[illegible] accustomed to drink [illegible]
liquors in as numerous a [illegible] as any
other of the same kind in this country
that I know of. I persuaded to have a
cup of [illegible] water alone, the
[illegible] troubled with [illegible] cutaneous
eruptions, & other marks of indigestion
& general relaxation, water [illegible]
[illegible] means so pure & so [illegible]
[illegible] saline & superacid particles,
[illegible] [illegible] in [illegible]
metals. (as these ought certainly to be
[illegible] subtle, mild, & [illegible] to prove
its property so readily, & to make a
[illegible] remarkable [illegible] till it [illegible]
time to be blended so thoroughly with
the blood as to carry off the superfluous
quantity of saline [illegible] [illegible]

Lect. 13th. Astringents.

Astringents are a class of [illegible] or
medicines which [illegible] any [illegible]
solid & apply to it an impression
[illegible] &c. it will be
made to contract & become more
astringent. Many [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
manner, according [illegible]
[illegible] when we come to attend to
[illegible] in the [illegible]
[illegible] we shall find [illegible]
[illegible] of water & solid part, [illegible]
incapable of combining [illegible]

(a) Where we do actually apply water
powerful enough to feed, such can
we fulfill the part & make it
necessary if it should be exfoliated, so
it except to act as caustics such
things cannot be done —

(b) We have great reason to believe
if effectually refuse the absorption
of stringent med. at least unless in
a very dilute state, for if we throw
into the stomach a quinque
infusion of it — there here we
also see, tame a quantity of Sugle
& apply to it a solution of gelatinous
it feed not lead of a purple black
color as it should do if it contd
any such astringent matter —

and is incapable of answering the
purposes of bleeding, had (as
theirs of the coagulum takes place
which is an effect of some kind of
kind of coagulation is produced by the same
means many other, as alum, oak bark, which
act similarly as astringents. It must
be supposed that some less degree of
coagulation might take place by applying it
but not so great as to destroy the solidity
But if the blood actually coagulates, they
must expect some particles of the fibrine
and the nature will be completely altered &
destroyed, because any substance which
shrinks, cannot act in a greater or less
degree, nor on a larger or smaller quantity
of matter. (b) All steam gelatin
has also perfectly coagulated — (Hydrogen gas
may coagulate the fibrine but that
part of it acts upon the vessels which is
completely contrary to the effect — the
intention was to coagulate a small portion
of a fluid, the portion of the completely
coagulated & destroyed — so of this kind of
astringency does not admit of but
a greater or less degree — Astringents
applied to the blood cannot act upon
their quantity — the respective effects
are related & there is hydrochloric acid
the simple alum cannot produce
the effects contrary that astringents
(Sulphuric & nitric acids) [illegible]
alum is all we can employ for
this purpose & that too should be
diluted with the whole fluid of the blood
it can possibly reach the vessels
[illegible] extend the range
a great [illegible] of the fluid [illegible]

more than of growing in No 5. I
have so divided a solution as not to
be capable of acting as a cataplasm
in this case, or as an astringent
We must therefore reject this class
of ingredients altogether — There are
two ways, we employ to contract the
simple fibres, as alum & oak bark
when we apply it to the fibres of a dead
body; but all astringents act on
the living fibre — We apply no
thing to act on the simple matter
of the body, unless when we simply
mean to act as caustics —

Strength does not depend on the
strength of a simple fibre, so if
anything did give greater cohesive
power to the fibres of the body, they
would not become stronger by it — mean
the fibres of an old animal are just
much tougher & simply cohesive
stronger than more of a young one; in
an old animal cannot contain
and as much strength as a
young one —

Vide No 2

Med. Medica

Lectures on the Materia Medica

By Doctr. Geo: Fordyce

No: 2

Art. 14th of Conditions.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Lecture 15th) Of Attenuants.

This Class of Remedies has been consid^d. by many Pract^s as of very extensive use, especially since ye circula^n of ye blood has been known — Obstruct^s were thought by ye Ancients to be the cause of almost all Dis^s — Paracelsus consid^d. ferment^n. as a cause, suppos^d ye tartar might be generated & obstruct ye vessels because tartar is produc^d in ye ferment^n of wine — Almost all Physic^s adopted this doctrine immedy & taught y^t fever, inflam^n & all other diseases depended on obstruct^n & viscidity of ye fl^ds, & so readily was any such idea received in gen^l —

(Moreover ye venous [illegible] more viscid than arterial — but this scarcely shews y^t it is more or less viscid — except in cases of [illegible] where ye part^s are thrown out by ye serum scarcely ever, as ye Menst^s & [illegible], we see no reason to believe there's any viscidity of ye fl^ds. [illegible] in an hydraulic machine like ye human frame, such an [illegible] is [illegible] mischief. Nature has guarded against it in 2 ways — 1st by [illegible] of y^e [illegible] [illegible] — and [illegible] ye fl^ds of ye body being formed of materials [illegible] & [illegible] [illegible] animal [illegible] either [illegible] water & a [illegible] fl^d [illegible] it sh^d be [illegible] [illegible]

in the human [illegible] an attempt
to attend. constituent part of the bl.
the superfl. water may be increased
by exercise, as jumping, bleeding &c —
it appears singular enough for
a priori we should suppose the
very reverse w.d happen — upon
giving a purgative & then a dose
find that days not speate so
frequently as before — yet this
by supposing attributed to the
thin new parts of the bl. beef wd
but if in such or a case we
spend a week we also find
of coagulum decreases? —
It has been supposed of certain
subst. of int. of bl. occasioned
obstruct. & course disease
from if such or other exp. were
there is subst. yet [illegible] immediately
but water for if regarded alkali
was given it be by saturated the
of vegetable stomach when taken a
reach of circulat. Thus if said
of such & such a nature, not exist
break down & resist effect of
may easily be conceived of & the
of horse & bullock [illegible]
[illegible] the 10,000,000 part of grain
and [illegible] such bottles
can have an effect on [illegible]
[illegible] & [illegible]
[illegible] & [illegible]
grace but applied — [illegible]
[illegible] [illegible]
as regard [illegible]

Ind. If we see as far as they are affected by fluids in the bl. respects they are pure so far pure —

Lect. 16th. Attenuants cont.

We are 1st to consider how we are to attenuate any of the particular parts of the blood — In the 1st place the red particles of the bl. are all of the same size in the same animal — but in different animals, of different size, & also as we know they are of the same degree of flexibility — If we look at the bl. circulating in the capillaries of a living animal, we find the red particles lengthen & shorten they get into the small vessels — in order to adapt themselves to the diameters of the vessels equally — Therefore this is not left to any chance, but there is some cause w. produces this constant & equal effect — Nor do we find the red particles altered except from putrefaction — Some p. in the living body they're broke down into smaller particles by putrefaction but it is only when it takes place in the blood to a very great degree — The only diff. we know of — the cause of the death, is that it seems to be rendered more fluid by increased action of the heart & arteries — Give some blood from a vein when there's considerable red particles with a little of the bottom — The red particles retaining nearly the same, the serum will

lee in respect to the fluidity of the
other parts, w.ch are certainly in this
case larger in coagulating — The
only difference we find in the
serum, is that so much it coagulates
less firmly than at others. w.ch is
also proved by Quantitation —
some.s we found it coagulate not at
all, but this is not from
~~[illegible]~~ coagulate by any means
in q. liq.d, but merely the same
accidental check put to the crystallizing
for every thing becom.s solid, must
crystallize — This we find in water
for it they will not freeze altho' it
be cool.d to a much greater degree
than q. cold w.ch ought to freeze it.
In q. same manner the fuming
nitro-lic acid gen.s will not freeze at the
cold w.ch ought to freeze it. The
freezing point of vitriol.c acid, is
20 deg.s of F—'s therm.r yet we can
hardly ever freeze it till we have
reduced it below 0, or more. not till
it is even considerably lower — Our
not finding coag.n sufficient in the
blood is a sign by no means that
it is not there, for if we take such
blood, or heat it to 130 or 140 deg.s
q. coagulates & leaves the
serum. Hence we can render
q. red particles smaller by inducing
putrefaction of q. fluid to a very great
degree — or can render q. coag.
in, or rather q. [illegible]

(a) If it were any mineral or vegetable subst. either animal or vegetable * caustic alkalies - concentrated acids lime-water quicklime & many other subst. will be capable of combining with it - But there must be Surgeon who the stomach or absorbed - and all these subst. are capable of being saturated with mucus & other similar subst. which they meet with in the stom. & intestines. Being thus saturated long before they reach the matter they have to dissolve, they wd have no change of at all acting on it -

of the blood more fluid so the coagulum is
difficult of coagulating inducing general
inflammation — but in no other sense
are humors of ——— As to any minute
extraneous substances that may be in
the fluids, we do not pretend to prove
by any experiments — they have to
support the present — but as we do not
remove from any opinion that they
are, we must consider them as existing
— But if there were any
insoluble or solid masses in the blood-
vessels it was not soluble in water
so capable of being further combined
with water, we do hardly have any
kind of chance of uniting it with the
menstruum (a) — If there are any
oily matter that has got in there
no menstruum we can apply to
combine with it, but subst. of such
a kind as to form oily matter
into soap — and such menstrua
as will combine with oils ~~of~~
will unite also with animal
mucilages & be saturated long
before they get into the blood — as
if it ~~were~~ a piece of a metal, if
it in, or a magnet with we
have no chance of introducing
an acid or any other menstruum
in so concentrated a form as to
dissolve it because we can not
get one single grain of acid or an

pound of the blood into the ~~body~~ system — A drop of acid diluted in a pound of any watery fluid and so too diluted a menstruum to act on any metal or even earth —

A similar idea has been that the points or edges of a corrosive substance must cut or divide the nascent solid particles — but this cannot be the case except there be a mechanical power to apply them — for instance a particle of mercury around which sharp edges were to roll about in the vessels, that particle not weighing perhaps 1/10,000,000th part of a grain its momentum would be so small as not to have any effect in dividing any nascent substance — Such opinions are not worth refuting —

We have by supposing that all these nascent or solid particles were floating about in the blood, and that their nascent or solidity destroyed them when they came to the vessels ones — We do not however see any such solid or nascent particles present, for it does not appear either from experiment or observation

In the 2d place, if they were present they would not get any admittance into the blood vessels, and have any chance or probability of dissolving them — Suppose they were present, and that they could get a menstruum into the blood

upels — of fm. Ven. pressed out by
the w.d. medical obsert. is difficult
of all, for be by the mere thum-
ds to be carried in the circulat.
to dilate them — If therefore we
consider of matter in a rational
view, it is evident that attenuants
can hardly be supposed to produce
any good effect in the blood-vessels.

As the figure of attenuants cannot
be considered in a curative as remedy
of ~~antiluxuriant~~ were to be principally
depended on for the cure of dis.s, we see
that as far as they are capable of
affecting of fluids in the bl.d vessels, they
are hardly sanguine, at best of no
more than simply to weaken
of system

Lect. 15th. Attenuants cont.

~~Bonl.a~~ ~~Ap~~ point.t. happ.s of fluids
are either venous various cavities
of the body — as the cellular membr.
vacuol. — glandular — cavit.s of glands
of the cong.l, h. of is either
coag.t — if of vessel bl.d they can
be absorbed again, effect being redis-
ten a bruise for instance of bl.d vessels are
ruptured, at the pinhole of the bl.d
vessels, and the bl.d solid — from
of it of. by taken up again, it is
necessary that it should be dissolved
in order to flow. but out of the body
place in the same condition as formed.

(a) The stimt. wd. have to be employd. for ye. purpose, make of alkalies as vol. alk. vol. liquid alkali in soaps &c. But they do not act by precipitating the shellac is certain, but they may be employd with success to encourage such incorporation

it and putrefy — Hence it may be, of
of a det. of putrefactive tendency in
the fluids, and it fluids the tissues
be taken up again — But there some
other spec. of tumor, viz. in the body
of this kind of fluid & reabsorbed sooner
than it would be if kind of fluid be
retained — for we see resolution and
reabsorption happen much sooner
than it possibly could in putrefy.
This resolution is forwarded by stimulating
the skin of that part, & stimulating
have in course, by imagination
penetrate into the part & dispel
it — It seems probable that when
there is thoroughness of matter
which is solid, it does not depend
entirely, but an indolent tumor
is produced in the part — In this
is very the case — Good supply stimulant
to the skin of the part, by that means
the subtle cont. may be dispelled
rendered fluid & reabsorbed & the
tumor disperses — Stimulants for
this reason have been called
discutients — The German Physicians
even the fluids is seen to be
modulate been much the effective
of fluids & their permanent. We find
if sudden such surprise — or fear that
suddenly produce acidity in the air
of a woman seeing such — and
in a variety of stuff in the stomach
is evident. There is some pain
in the solids which remains, the fluids

a Phlegmon for instance,
a quantity of coagulated lymph is thrown
out into the cellular membr. &
coagd. and if we carry off the
inflm. we find the whole of
matter absorbed & absorbed
in less than 24 hours & this
not only the Cylinder but of the
body in a short time

wd. are lead, solid, & solve much sooner than they therwise wd. do — or
Atmos. increase the pressure on the solids & make them shrink & let the mercury & much sooner than otherwise wd. be — This not possible if any menstruum can be applied if can get at any other & cause it to penetrate first of their a way already observed, any thing that shrinks up must be broken by the hydraulic or whatever other absorbent bibulous pipe may be, & carry & immerse into the circle — in the same manner it will happen if any substance is thrown into the stomach that there will be no menstruum to be given, it wd. not be retained in the principal part long before it gd. by peristaltic action so as to get as a menstruum on any subst. it might be contd. in the cavity — Mr. Wh. have been called to shew any part to resolution the pill. have been called dissolvents — but they do not act on the simple matter of the body

The very mind & conception we are to consider as one wh. consists partly of a material matter & partly of a celestial — wh. forms in the infinity of passages, & communications that exist — All of the

a Spirituling in all Prayer the same
effects — Take Recumpence of amamonical
Salts of Prebolgad & Fitzsh Spe red. alfa.
Pedeff. in powder & lee of grains
and in Potions of Pis, concentrated
Pis but sempte & in glass, and to
al hale Bottle & in sange vegetal
smatter as a mind bits Pis infus.
Plinsed &c. —

of the body cont. in them
putrifying matter, so if any of the
applied to the dead matter it will be
destroyed immediately — In the urinary passages
it happens more frequently concretions of
the same kind are formed in the
same concretions are soluble in water
for if we take a piece of a stone from
in the bladder & keep it in warm
water, renewing the water frequently
it will gradually be dissolved & if
injected into the bladder, they concretions
matter of the stone of water and dissolve
these concretions — Fixed vegetable alkali
or fixed fossile alkali will distinguish
the concreting matter of the stone
have given any person of quality of
fixed alkali or fossile alkali & he
cant take above 33 grains in
24 hours for 6 months or 2 months
we shall find the urine will no
longer concrete any salts if a
applied to it — After the concreting matter
of the stone is dissolved the alkali will
act on the stone itself in the
same manner that the water
would do — It first begins to soften
& dissolve it on the surface and
leaves the alkali in a gelatinous
state & the concreting matter
of the stone will be totally destroyed
in what manner the alkali dissolves

a) A large quantity does not at all
increase the power of the mind
though it may ~~contribute~~ at least
not be a drawback. Extent of the
field of prodigious extent but it is of
little use if that people have gathered
all the manures and left it of
little consequence whatever ——

b) Poverty of the mind may be
applied to combine with it for the
allegorical dispersion of solid philosophy
and science they of dispel
the clouds of superstition & the
darkness of the foreign & their
vacuation ——

It may be said however that it may
may therefore be found in the bladder
in the bladder after death
but for some length of time
after the same substance may be
alkali, mild or caustic or substances
combined with oil or mucilage
so as to form a soap. The latter
quality for example a solution of
alkali which may be seen
length of time without dissolving the
stone in the quantity of 15 grains
in twelve hours at — is
absolutely necessary for medicinal
purposes a very constant
[illegible] of concretions
be repeated

The method of concretions with
biliary ones such as are found
in the gall-bladder, & the liver
but chiefly in the former are
resinous substances. Bile contains
resin which is one of the
principal properties of the
concretions called gall-stones — If
in the biliary ones the
resin predominates — It is clear that no
menstruum can be applied so as to
dissolve a biliary concretion, for it is
not soluble in any menstruum
therefore no only matter of consideration
is it so as to be applied but to dissolve
it

of a mixture applied and not to a part
to be destroyed it, has been called
actual cautery & caustics &c. and
the effect of potential
cautery, or caustic

Lect. 18th. Caustics & Escharotics or Septics

Caustics — These are substs. used & employed to dispose solid parts of the body — When we want to separate any part of the body from the rest, we put it, and the substance in by applying it to it and then will combine with it so as to form a sol. or subst. soluble in water. These will act part way, and causes round it a separation of the part of fibres which is just at the turning of the living part & the dead are into a fluid, so as to form a sep. tissue. ~~[illegible]~~ of dead & living part — One method of doing this, is to decompose the tissue. These act by heated to decomposition & gently & entirely & leave the sol. part & fill it — When the death of the part happens, it is drawn off & ~~[illegible]~~ it was supp. by a subst. or by a part had combined in the nature of fire — and for this subst. the Grade this effect was called caustics. Accts. as the discovery gen. employed a substance red-hot by dipping any part of the red in it cut out the part of the potential cautery — of this is the means — 1st. it may dispose

[illegible]

above mentd. & that perhaps upon the
cautries not dissolving slowly give
that pain which we have in the
dispensatory a guilder cautie as it
is call'd but it is fit to give more
pain than a strong blister — the
inflam'd part is also more
sensible than ulcerated. &
yet if we employ cautie if dissolves
slowly, it gives time for the part to
be inflam'd before it is dissolved, and
consequently the pain is more
severe —

or combine it with it as caustic
alkali — 2dly it may coagl. a part of
nitre of silver — 3dly it may act
as a solvent so as to build the part
simply without decomposing it.
But we only employ such as will
combine with it, & thereby or coag.
it — It is rarely that we employ it
actual cautery — When we do, we
use a piece of iron or silver that
will not — but gold wd. be much better
than either, as it commences quite
more readily & of course burns
faster — Caustics differ from one
another in this, that some of them
destroy more speedily than others
The former sort are best, as they
give less pain — There are
some caustics which have a good
deposition to suppurate & others which
destroy simply, without producing a
suppuration either to good or bad suppu
We shd. generally employ the first, if it
acted as quickly as those which simply
destroy a part — Those which destroy
are caustic alk. & quicklime — of
these of lime is rejected as dipola
too slowly, & mild alkali for its tendy
in cold. for its volatility of the fixed are
on the part — There are others, as
nitric & sulphuric acids which act
quickly but they of ten cause the

a) A piece of leather spread with common plaister with a hole in its middle of size of caustic one wishes to act, is put on the part, then the caustic over the hole is to be pressed down to the skin, & covered with a few slips of plaister

(a Lunar Caustic is made by combining nitric acid with silver, evaporated to dryness & then melting the salt

b) To make nitrate of mercury, dissolve mercury in nitric acid & evapd. of water to dryness. Then expose the salt in a glass retort to about a red heat for half an hour. At the end of this time it falls into fine red crystals, part of the nitric acid being driven off — This substance has been called red precipitate or mercurius corrosivus rub.

c) Dr. J. Thinks one drachm as good as a pint of the Bath fully, or any other

well as of part — therefore they are
the considered preferable — We therefore
at present use of liquid alkali in
a perfect caustic state — This is
convenient to employ them in
powder — but better to mix the
with soap so as to just make them
adhere to the part (a) Liquid alk. is
sometimes preferr. to mix alk. in
dissolved more quickly — Liq. alk. is
employed in England

The pastes we have a good deal
to suffer are metallic salts, of
which nitre of silver is of one use
when any considerable part is to be
dissolved — (a) — When we want to
destroy but just the surface of a wide
we use nitre of mercury (b)
Verdigrease was formerly used
in the same cases in the same
manner as precipitate

Pastes destroy ~~dead~~ dead
readily than living ~~the~~ mass
of the same quantity of caustic destroy
a larger part in the weaker than in
a strong body — Hence there's an
advantage arises in the caustic
nice the knife — and besides as
mentioned some pastes have a deg.
to have ~~[illegible]~~ good suppr. be
on — If there has been any ulcera

matter forming a tumor, it may
not be expedient a caustic dehor
~~[illegible]~~ for dead part in preference
to the living, so as to clear off part of
the dead matter. Hence caustic
have been sometimes found in gang
& the cases of the knife. It is
also extremely painful to drag a
large mass by caustics. There are
of means of removing dead tissues
or removing solid matter fixed. The
chloride class of substances, and
INGREDIENTS of blood. The same
arguments which we held with regard
to attenuants will mostly also apply
to ingredients. We may add the
capability of red particles of blood being
giving food & good nourishment to
the strength of the system. Lastly we
cannot render red particles equal
enough or secure more vigorous
as far as we have. Some were
to render any of the blood
solid, we should easily do it, whilst
we do not wish it effected matter
should be converted, so that indeed
inspiration have been newly connected
as a class of medicines of some of
great use. The only case where
we employ any thing of this kind
is, coagulants in hemorrhages —

(a) Mr. Cooper Pupil to Mr. Stine informed me of a case wh. shewd this contractile power of the arteries when divided, in a wonderful degree — by a compound fracture of the os brachii the trunk of the brachial artery was divided, & scarcely any hemorrhage ensued owing to its retracted ends of the artery strongly contracting. There was no coagulum formed & there they were easily felt thro' the wound made in the soft parts —

When a vessel is broken or cut the
coats of the blood vessels are stretched
a stop to hemorrhage
Formerly this coagulum was made
to retain the blood by employing of actual cautery
but in modern times of practice
styptics or vessel ligature instead
of suffering much more
severe than by coagulum. Other
~~styptics~~ heat have come into use
Styptics — When ligature cannot be
adapted to tie up, styptics are
made use of. Some advantage
when of smaller arteries are wounded
they will generally either contract or
of ~~coagulum~~ blood will form coagulum in
of intended ends & stop of bleeding
for merely from of other blood being
no longer acted upon by of arterial
it will coagulate of same as when
it flows into a vessel. Small
arteries may thus generally be left
themselves — but large ones are
in safety without a ligature. In
cases therefore it is seldom need
to use styptics. There's a great
ground on which it has been said
styptics might be employed in place
of ligature, which is of great importance
principal part of pain in
operations of ligature — for
it been conceived of so objectionable as
a stimulant produced fatal, indeed for this

In this case, indeed, if a
styptic be applied, it will be little
but it is not the case. When the
hemorrhage has been prevented
operat. by styptics, the symptomatic fe
as the superf. pulsat. have been calm
in this case, the patient is as
great a height as when a ligature
has been employed. Styptics are exce
cuent in their effects, & can
hardly be urged too for all the purpo
for which such prepar. are
consid. useful, yet they
may be equally in the
menorrhagic species. After taking
the life of a horse styptics have
been used with such success as to
stop the hemorrhage in the large
arteries, but still such operat. are
not conclusive, with regard to the
human body, for appl. made
to other animals are very not applic
to the human body, as we have alre
observed, especially in this
as the inter. in man and other
animals. Then
they happen to be not a hemorr
is produced, which so serve to stop the
bleeding than prove the hemorr
species. We cannot [illegible]
transfer the spec. to one and
the same animal to the human
body.

I have heard a medical Gentleman
say, that he has found a solution
of alum (about ℥j to ℔j of water)
very successful in uterine
hæmorrhages after delivery: — a
very contrary effect to Dr. C's idea
of it. Now — a few cases are not
suff.t to establish the real effect, for the
stoppage of the hæm.e might naturally
arise from other causes perhaps during the case —
Mr. Hunter speaks much in
praise of the tincture in
hæmorrhages —

We may give a Horse 3 4 of
Grains Metallorum but we
can scarcely give a man as
many pills for
fear of their injurious safety — & so
we cannot get it a vessel with a little
stopper which be displaced & such
is immediately contract of fresh air
better than such as coagulate among
fibrin by Alum in the latter the
it makes the coagulum contract
so much as not to adhere to the side
of the vessel — such as have but a little
coagulum are fine fibrous & so
adhere & some other substances plant
those fibres are fine — fibrous act in
of same manner as the other
coagulum fibrous & fine fibrous
substances. It has been done in stag
only to a male — there fungi have
a small def. of prov. in coagulating & they
have been employed with considerable
efficacy — the resin & subst. as oil
of turpentine & dragons blood, &
japan earth have been also low
advantageously employed as styptics —
Gum of the coagulum of there is some
too great, obj. they are still liable
to be affected with Armenian bole or any
other subst. of same kind —
Acids directed to check fistulous
ulcers have been employed

with Opium as well as alcohol
Alcohol given cautiously for general
or may perhaps be employed with
a considerable quantity of water — by
expanding the large stomach, remove
relief as much as possible because if we can
surface of the mucous, the
coagulum will form a large
extent it will keep multitude
suffering & prevent — Sometimes
in Cinchonism there is an inflam
of the stomach & bowels very
few many small vessels — the
case some have effected stomach
although of recovered — Opium
ch. & the consider. it's much better
to shelter this by employing internally
acids with gentle astringents — as infus
hydrochloric acid (with the nitric
acid as of Mr. Rosenquist) — alum —
such internally as we use
to stop hæm — there are
more effect than stimulies effected
of Cart Dr. sometime do
end to prod. such irritation on
surface of the Cart —

Lect. 17th

Of Demulcents.

Demulcents are such substances as destroy acrimony of matter in the tela cellulosa. It was supposed of stimulating matter that sharp points, on running into parts pricked & stimulated them. Or if there were certain substances whose parts were soft, into which those parts might run & by this means of stimulus will be taken off. This hypothesis or doctrine we can only be conceived as taken up for a moment even by those who have a very imperfect idea of small parts of matter. For this infinite smallness has proved any such effect if they were pointed, even so sharp indeed of smallest into gravel particles of body, might be of sharpest point possible but it might well be so small as not to be capable of running into or stimulating a part. But if the consistence of substances shewing a decomposition a substance its properties will be destroyed & it will be prevented from having any further effect. Thus if we unite water with caustic alkali, they unite & form a soap, which will no longer act as mineral matter by its properties. Therefore when there is a scarcity of mucilaginous matter applied to any surface it ought to be washed off & other of

vaccine ~~[illegible]~~ for the poison of the small pox will prevent the taking place of the disease. We must take care to remember of the poison of the small pox is diluted as not to dissolve or inflame the surface itself — We know of no other substance which can act in the b.l. respect so as to combine with or decompose the noxious matter — We know in fact we have no instance of any noxious matter disappearing in the system in consequence of any remedy except the vaccine matter or the mercury being used — Whether mercury acts so as to combine with the poison, or to decompose it — or whether it produces some action in the b.l. respect by which some new fermentation is induced in the noxious or decomposition — or whether the fermentation produces some this matter — or whether there is some action which has never been conceived, we do not know — All we know is, that on the exhibition of mercury, we find the noxious matter in the system destroyed — It has been acted as a powerful antidote but we must consider it under the head of stimulant

the cut. w^h have carry^d to-
connect^n as numbers are usually
employed. When any surface
of the body is stiff, of appl^n of mild
daily med^s will in many cases
prevent the stimulus from acting.
It is easy to see how this happens
in cases where any watery fl^d
is flowing out of any cavity in the
body — as the eyes — nostrils — mouth
&c. so as to stimulate the skin near
the cavity — & special oils rubbed on
the skin prevent the watery fl^d from
touching the skin, & therefore from
it — for the same reason the skin
there covers such a quantity of watery
fl^d that the skin is so dry
to stimulate & inflame — as happens
from the behind the cons-tituents of the tights,
& in other parts, especially where the parts of
the skin touch one another — or when
a quantity of watery fl^d flows out from
a surface of an ulcer, especial oils
apply^d in ointment in some cases
prevent their being stimu^d but not
in such a deg^e as to prevent inflam-
mation from taking place — We may
consider both mucous & daily cut
as acting in the same manner
in inflam^n of mucous membr^e or
mucous membr^e of the throat — & without

in gangrenous — of the rectum — &
gonorrhœa, when dependent on it.
In such cases we may consider
inflamed bowels both as sympathetic
surfaces — purge in effect of the
stomach & intestines do in cases of
poison — in chol. morbus — diarrhœa
& dysentery, we may consider them
as acting in the same manner.
Have ~~been~~ considered inflamed
mucous surfaces of lungs, of kidneys — enters on
the order in every diff.t — They cant
get down the trachea into the lungs,
& there's no possibility of their getting
to the kidneys, but from the blood
vessels — It is immaterially diff.t to
conceive of an affected bowel, and
in such cases get the stomach into
the blood vessels, & so be affected by
surface of the lungs to extend even in
catarrh, in persons whose daily
as good a consid.n quantity of fresh air
will not have any such effect —
in those whose bodies contain
a large quan.y of spent air, air
perhaps becomes a poison — Dr
Mac-Ti of Pennsylvania, Dr Gail Galion
Windsor into the lungs, & had
effect on the lungs, and we see the
same effect — Especially, a sweet
atmosphere be dashed on the office

10/ A solution of neutral salts in water possesses much greater density than water —

in the lungs & urinary passages but we have seen cured effect from them in both cases — the stimulating matter in these cases, is the neutral salts of the blood — now it is well known as a chemical fact, that castor oil, have no effects on neutral salts — for they neither combine with them, nor decompose them — By what means they are effected in these cases we can't say — that we are not to reject all remedies because we do not precisely know of manner of their action for if so, we should reject most of our most valuable ones. —

Lect. 20th. Demulcents cont.

The 1st class consists of a natural class of plants called by Linnaeus Monodelphia, all of which have mucilaginous juices — [illegible] the mucilage and [illegible] of wheat, [illegible] is an [illegible] advantage [illegible] of the [illegible] made use of as an effect of [illegible] passages —
[illegible] experiments of [illegible]

gum — no matt. class of plants — but so
agree in this, that they contain a farina
ceous matt. a gummy & bitter oil
& yield in infusion in water
or decoction, a mucilag. or gelat.
matter — These, semina cumulos —
cydonionum faenugraeci — lini — psyllii
plantaginis &c. & all these yield
in infn. in water, better than in
decott, a very fine mucil. matter
They have been employed in
diseases of the mucous membr. of
the bowels.

Salep, Dulcis consists of a natural
ness of Canada, wh. when dry have a
very fine mucil. juice & a peculiar
odour &c. — but wh. have been little
used lately — Indeed of no. of these
mucilag. infusions we have so great
a variety that they can be dispensed with
one for another and their.

The next class is of aromatic & oleaginous
Seeds — Consolidantia, carminativa —
pulmonica and others of this kind
have been in use — They contain
a very fine mucilag. juice & mu
cilaginous oil — but are at
present little used in practice
in this country —

The Papaveraceous seeds are of papa
ver — cucurbitaceae — as semen cucurbitae —
citrulli — cucumeris — melonis — These
were formerly called semina quatuor
frigida majora — They are used in

(a These have been boiled [illegible] the
seeds into a mass & afterwards [illegible]
thro' water - wch. dos y^t. call'd an
~~l~~ emulsion - emuls. have
been used as demulcents in
affections of the lungs & prima via.

(b These have been universally used
& emollients - wch. farinaceous matter
[illegible] for [illegible] [illegible]
with [illegible] ~~a~~ also ichthyocolla —

(c All may be employ'd internally & externally. When any want any [illegible] oil it sh^d. be a fluid oil. The [illegible] of the [illegible] [illegible] at sperma ceti wch. is the expressed oil of certain whales found in [illegible] crystallizing [illegible] & more [illegible] oil - but the naturalists have [illegible] [illegible] leaving the oil of them to stand to crystallize for about [illegible] months [illegible] [illegible] wch. it is cont^d. are found [illegible] wth. spermaceti much in the same manner as they are wth. tartar from wine has stood in them long)

in use. The roots of Althæa, dium
scow. other mucs, & seeds of various
plants, contain farina & s. matter
in a concrete quan. of superfluous
a. The next class includes sugar
& subst. consist — as saccharum
— mel — manna — lactis — fructus
fructus — cynorbati — glycyrrhiza.
These have been chiefly used in
the form of the simple class —
The mucilaginous gums — which are of
a dry nature mucilag. some farinac.
Gum Arabicum — cerasorum — sassafras
mucilag. & G. Tragacanth. farinac.
6. We might have added Parts from
other parts of animals which dissolve in
water as animal matter & animal matter — expressed oils — as
olives — almonds & oils prod. from
fermentations. These have but little effect
oil in them — also expressed oils of
animals, as butter & fat of different
s. many somewhat in nature of the
best of vegetables — some of a fossil consistence
These are the subst. which have
mentioned. There might have been
an enumerated a great many more
but there's so little different subst. for
the 5 of these we shall be sufficient for all
the purposes of demulcents.

Sect. 21st Of Antacids.

There was a time when all dis. were suppd. to arise either fr. a redundance of acids or alk. of the fluids and especially of acids so that [illegible] [illegible] acids were introd. into [illegible] [illegible] many of them are still retained in use. — We know of none, and acidity any where excepting [illegible] [illegible] [illegible] any of the secreted fluids any acidity but acids may get into the bl. [illegible] indeed [illegible] [illegible] act as [illegible] but of this there is [illegible] and the least acidity to be found — We generally [illegible] antacids in order to get rid of acids in the stom. [illegible] in these instances [illegible] [illegible] [illegible] these [illegible] only [illegible] unite with the acid [illegible]

There [illegible] consist [illegible] the neutral earth — [illegible] [illegible] calcareous [illegible] [illegible] [illegible] been [illegible] The only difference is [illegible] [illegible] calcareous earth [illegible] [illegible] alcal. earth [illegible] marine animals, [illegible] shells [illegible] [illegible] [illegible] [illegible] chalk — [illegible] — ~~cancr.~~ oculi [illegible] [illegible] [illegible]

Coralline, lubricus is a pure calcareous earth — mild as water shells &c. of oyster — fish bones. Prepared chalk, calcareous spar, slaked lime acid in the stomach — magnesia precipitate of a soft fine powder is a compound of magnesia & vitriolic acid — if we wish to have it mild, we prescribe it as mild pot. alkali & carbon — & carbon neg. alk. If you consider whether we use it mild, or caustic (comb. or uncomb.) in the air, since it has no disposition to stimulate as quicklime does — Lime water has been used to delegate acid in the prima viae — but inefficiently — In general form such calcareous earth & magnesia are the best. As chalk internally, and the acidity for the regulars, it is apt to produce flatulence & prevent the digestion of food taken — A small quant. of mild alkali may be also given — but not much as it will decompose the muriatic acid in the prima viae — but it is too powerful a antag.

The acid in the stomach is the citrous — and the best bitter is the mild alk. & salt. & magnesia should be given in

(a) The Laplanders live totally on animal food, & yet have no [illegible] of the gout, and other causes —

fresh, so little alkali many of the
bases to entirely saturate the
acid in the prudina mia —

Lect. 22. Of Antiseptics

Antiseptics or antiputrescents are
meds. intend to prevent the
putrefact. of the body or ~~[illegible]~~
~~[illegible]~~ — All animal subst. are
subject to putrefaction, by wh. we call
putrefaction, by wh they are converted
into a mucilag. matter & finally
into mitrous & muriatic acids — nitr.
alkali — calcar. & argillaceous earths.
gas — inflam. air, & fetid vapor —
the bases already abound in the
human body in solut. in these
circumst. — wh. fermentation takes
place most readily — but if the
principle putrefact. be taken off
the rest is quite as liable to the
rapidity of living matter, not to
putrefy, as dead matter to putrefy.
As long as an animal is in
perfect health putrefac. does not
take place, but only in dis. and
this in 3 cases — 1st if a man who
has been accustomed to live upon
animal & fatty food, & who
has lived an idle & luxurious life,
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]

[illegible]

The Cumberdale, large & they were
conducted by the Physicians and an
animal food, entirely & many other
people as the Lycanthropy & Colic
in very cold regions near the sea
subject entirely on fish for 6 months
that are shall & pickled & yet they
are as healthy as other people — However
the habitants of this country of Greenland
are confined entirely to animal
food, especially if it has been preserved
by salt, hence the cause of the
disease which is called the sea-scurvy the
pains on land as well as sea
the cause is called preceded by
debility of strength — languor & dan
gerous fainting & taking a fever is also
a part of the disease — and take
place among such causes —
2dly the causes in a colder climate
where there is a deficiency of strength
3dly the cause of the prevailing
an unfit food, that a defect of defect
strength & weakness takes place
which is called by the cause of the disease — This
is a disease which takes not
very common — In this case, a
medicated liquid & then appeared of
a strong heat. take the
the cause is good in the
there are many of preventing the
one is by applying an antiseptic
a quality — however of putting on the
of the ~~[illegible]~~ on the quality food
a old form style it will rather

(a) What we cannot be certain of
till we shall find if we can not
employ any substance in such quan-
to have any effect on the patient
For instance we are to the Dis-
ease and Muriatic acid, or
Mercury in Lues. It will be prudent
for practitioners not to be placed in
strange circumstances & perhaps
to many pounds of blood from a body
we cannot apply this quantity of acid
without or Mercury perhaps we be
prevented but some cases by no means
do this for only 5 or 6 grains of
nitric acid can be given for a dose,
(Pierstone) and being able to bear
more and Pierstone will not
bear of dose to be repeated more
than once in 24 hours so that
the whole of acid of cantharides
into of stone in 24 hours is not
more than 40 grains of every one of
these 40 of a grain will be to say
by filtel a grain will be taken into
of superfluous water — and see by
calculation it amounts in the last
so that we cannot get in so much
to say the tasteless of acidi-
fied a pint. Gray in his account
is can be given of cases and experiments
acidity if blood for my opinion
[illegible]

came a dispute to be decided whether
Prometheus — Prometheus should take fire in
a Phial or vessel, or should only lay aside
a phial or vessel, the subject — suffi-
ciently to prevent the gaining fire the
other Prometheus, if he stole fire
forgot to lay — he cannot therefore
imbibe a quantity of acid into the blood
respecting the effect of all Sensible to any effect
whatever Therefore it will have only
power of checking putrefaction, if
true, upon Water, or any other
substance of same kind, it is a question
whether any part ever reaches into the
blood vessels — a solution of Prussian
blue of a Death color, if any part of it
is applied to it — Post after having
drawn into the stomach, gave several
a quantity of solution of Prussian blue
hours after spending the abdomen
letting the whole Prussian blue, cadaver,
applying green artichoke, no discoloration
other fluids — so that it must be a
question whether any portion
of it reaches the blood vessels — in the
ides, certainly not in a sufficient quantity
have any effect in counteracting or
in coagulation of the fluids — the ocean
carry arising from the use of putrescent
and any rare antiputrescent —
differentiative tests, color of
Prussian blue — depends as such
[illegible]

[illegible] with any effect, so it in fact proves no substitute by to be employed to produce any effect as a med. it will prevent it indeed for a time, or restore it from a fluid state to a coagulated one — the only antiseptic, then, it can employ, is good, strong, rather to enter into the acetous, than putrefactive fermentation — as such respect is it usually painted dark. This by forming a single, it is not disposed to putrefy but on the contrary rather to become acid, gradually takes off the disposition to putrefaction of the fluids — which it had already gone forward and produced putrefaction in the system. But there can only be employed in cases of sea scurvy, for in fevers & where a deficient strength takes place, nothing (yet) kindly neg. good has no effect — but restoring strength to the system is the only means in these cases to take off the putrefactive disposition —

We have now gone thro' the various classes of med. & have in conclusion to attend to the disposition of matter of the body — & we have an examination of there are few of them, we have any cases in the opinion of med. — Perhaps we can [illegible] what if we will [illegible]

as I dare not presume to make an
enquiry into the grounds of such
belief & more especially since
all those Authors who have consid
red as depending on the actual product
of matter of blood were totally
unacquainted with of matter &
the red particles of the blood are
sufficiently conspicuous for their colour
to have been actually seen — but it is
not 200 years since the venom of
poison & most half of time impo
ssible was discovered by
Dr Fabrogue & he himself
discovered of Gutta coeunt medicla
& also almost all of properties of
the different parts of the blood that
are now known —

the Greek School of Med.e & among many modern Pract.rs great dependence has been placed on the alter.n of the properties of fluids and there are the authorities in med.e for the propriety of fluids or more of the animal matter being so altered, constitute the principal cause of dis.e & that most med. act by prod.g the reverse alter.n by restoring the matter of the body to its former properties (as

Pract.rs who have described the prop.s & alter.s in the matter of the body when they were totally unacq.d with the properties of either of solids or fluids cannot certy be cited as any authority in med.e — In fact, the body is so constituted that there are many causes alter.n in the prop.s of the matter of the body, that are capable of producing diseases —

Vide No. 3

Geo. Mather.

Lectures on the Materia Medica.

By Dr. Geo. Fordyce.

No. 3.

Lect. 23. Of Stimulants.

Stimuli are such as act as being a moving part into action, whereby it is produced or increased, if it be of a hard elastic in question. — We have said of all of moving parts are contracted in a living body & of the same in a dead one. Even when they are at rest, they contain some quantity — some elasticity — but it contains of some a certain length of time. We call it of tone of parts. When a moving part is brought into action it contracts more easily, & can generally last for a very length of time but is succeeded by a relax. — If one body acts on anes hand, a stimulus in which is easily perceived & shown if fibres are contracting contracting & relaxing.

Altered contr. & relax. may be effected in 3 ways — 1st. quantity — can be more, be more — 2d of force of contr. — & 3d. quickness. All of these may be increased — or is more effected in of contr. of heart & the Opinion of some not in coming accord. of strength of contr. of heart & studies & of some time not uniform, slower — Pol. alma will depend of pulse, may be more & less smaller — 3d of time of contr. may be more — in first — or of degree of contr. may

Volatile alkali applied to the nostrils
will effectually bring on an
immediate action of the heart & a sudden
flow of heat throughout the circulation
of the whole body

and with the effect of force or force — if
force may be said to be the effect of force
as stated — There has given a
doubt about many med. whether
they were stimulants or sedatives
for instance the renders of pulse
strong & hard slower, has often been
called a sedative — the
effect med. stim. & sedd. are
very different — we are very apt to
confound — Every attempt to define
an irritable part, stim? — Distinct
stim? med? parts of the body capable
of being affected — Striking on cutting
certain parts of the body frequently vomits
as well as diseased — easily on perform
of chemical analysis — Effects
are of many med. on stim.
to have no power of chemical or
mechanical action on any part of the
body — There were supposed to have
strange powers & friends of such
such an idea can only arise in
a mind which has been inattentive to
the circumstances for the small
important parts of the body are so infinitely
small, that were they even so strong
they could not stimulate — nor any
part of themselves, stim? — The
great part of our stimulants act sure
specific not mechanical or chemical
effect on parts — When we use stim.
in med. it seems rarely if they are
applied to the part they bring it in a
state (a) — But these cases

(a) When any thing is taken in [illegible]
mental, it does not touch the mental
but acts thro' the means of the senses in
2 of same 17 of Hom. R. &c

rather more incidentally we shall
find that it is very rarely that a stimu-
lant is applied to the part to which it acts — Wine
& spices pass into the stomach without
acting on it so as to excite the action of the stomach
& other — they act long before they
have time to be absorbed & carried by
the heart & arteries and stimulate — and
so they reach their subject through
the stomach — When we apply
cantharides to the skin, to excite the
action of the organs in it the stimu-
lus by no means applied to the part
in which is to act upon — for no fluid
can penetrate the scarf skin ~~so~~
~~fluid can penetrate the scarf skin~~
and so the lymphatics & exhalent pipes and
orifices of the absorbents as the skin is
~~not pervious~~ impenetrable to the lymphatics
absorbents or exhalents — Cantharides
therefore are never applied to the part of
the skin to which they stimulate — where
action they increase — so that even
when we apply stimulants to a particular
part so as to produce an action in the
stimulated part — speaking generally
parts of the body — the stimulant
Action differs from one another
this — that some of them have their
action confined to the parts near
to which they are applied as the action of
gums applied to the mouth, while others
of the blooms — in the lungs — while
the vapor of volatile alkali taken in
only the lungs — in the mouth &c

a Princes applied to y. storm, act
universally on y. whole system,
& yet tend to prod. a universal
influence.

but in every other part of the system
some stimulants are partial & others
universal — some stimulants
tend to prod. excitement in the
whole — Bin an inflam. of any
kind, or prone to a bullous form, and
we apply cantharides to the skin, they
will then cause the inflam. to extend
on the surface of the part — on the
contrary on the other hand, any resin
as Olibanum, frankincense, turpentine
is applied to the skin will not be inflam.
but the inflam. of the gums will be increased
are benefit. Prob. to suppose
such stimulants tend to prod. chiefly
inflam. in the particular part, tend to prod.
in the system ~~must~~ have
been called inflaming stimulants as
spices — resins, gum ammoniac, &c. (a) other
stimulants are also universally have
a tendency to excite excessive inflam. prod.
rather fever than fulness — strength
or hardness of pulse — or that stimulants
have the tendency ~~of partial~~
universal — We have said that there
are some stimulants which act on the
part to which they are applied or as to
affect other parts of the system
some which have their whole action
on the stomach when just applied to the
as spices, &c. not a stimulant for 30 or
40 min. but by the time we find cause
they are got into the blood vessels their
stimulant effect actually arises from the

a. Hence some stim.s are more
temporary - become more permanent
in their effects - Almost all those
stim.s w.h enter y. bd. sup.d before
they begin to have an effect, are
in flam.y ones - and tend to prod.
phlog.s genu.ly —

action is entirely on the stom.
There are others who act but very
little on the stom. ~~but have~~ &
have their action lasting 5 or 6 hours
for their exhibition & cont. for
3 or 4 days - as resin. out of mercury
when they are got into the blood respir. the
probably act on the mucous p. is a very
irritable part - & perhaps on all the
secretory organs (4) We have no very
tolerable ev. of inflam. on surface of
the intest. & veins is irritable.
These are some stim. which are
capable of affecting one part of the
body rather than another. Is one
called a specific stim? - There are
some of them which may be different
that of system to get to the part affected
particularly attack - Can that be
stim. if much of the addition must
be absorbed in order to stimulate it.
If juices are not absorbed, they do
not stimulate - Also mercury. It
acts on the glds. & if remains must
be absorbed & get into the system in
order to prod. effect - Some have
supp. that this other was in consequ
of their being secreted more easily - and
by a larger pore applied to a particular
part - But examine this idea,
it appears clearly false - for some stim.
are actually a process of stim. & an

(a) why it was inserted into the bill as an
and effect of stories rather than
any other part Dr. F. can tell he
does not know but says if he
will undertake to explain it
if any person will take the trouble
a stimulant good nature is at any
rate — But this, Chas. said to
many other passages, he see the
part of but cannot explain

had more than another — Oil
should the intest. more than
the stom.ch — but this cannot be ext.d
they are partly appl.d to them, for
they pass thro' the stom.ch before they
arrive at the intestines — and must
have been applyd in a more con-
centrated state to the former —
Moreover, because the intests are
more apt to be affected by aloes —
Hecac. has an the contrary, a great
disposition to act on the stomach than intests
Aloes be wholly absorbed from the
surface of the body — it acts specifically on
the intests. & if there be injected into
a vein, on the stomach. 14 But
there are stim.ts also w.h produce action
in particular parts without entering
into the course of the circulation as
Cuscan? to the heart — A dislocated joint
under certain circumst.s produces violent
vomiting — Pts. if they are invited
connection w.h the stomach — In a variety of
other cases, applys made to one
part, affect another —

Oct. 24th Stimulants cont.d

The purposes for w.h we employ
stim.ts are just to promote digestion
in the 2d place it must be remarked
that all med.s are bounded in their
cases — all applys made in a certain
case for their particular effect

Poisoning venom in the stomach & forms its peculiar effects — & inflam. in other parts of the body —

& become simple stimulants & of
a nature of dose & med. it effects loses
its effect instead of ~~becoming~~ having it
increased — Med. therefore partaken into
of stom.ch in choice a cert.n quantity act
as simple stimuli on of stom. it prod.
sickness & vomiting instead of having
those peculiar effects on of other
stom.ch makes of stom.ch lose a
large quantity of med. prescr.d without
fear of sickness — For this reason
we prescr.b opposite stim.ts when
med. — They must be such stim.ts
as are themselves agreeable to
of stom.ch & cannot compl. for this
purpose — We use stim.ts to incr.
of peristaltic motion of of intest.
such med. as have a particular
disposition to stimul.t a increased of action
of of intest., we call purgatives — but
mean those & we do not purge
simply as purg.t are prescr.d to
keep up the peristal.c motion of of
intest.s — in which case there are
more hopes & for it continues to
attend. & the flatulency & hypochon.c
affection stand. & are not to be
cured by purging as purg.t are not
to increase or incr.e of peristal. motion
in opposition to of intest. que
are stimulants — Th.y tend to
take off & diminish. cant.e glu.y

because it then arises from a
partial stretching in the whole
system — obstinate by means of action of
mind. A more regular course of Physic
is spasmodic cont. is a great action
in a part, yet strengthened by the
it of spasmodic cont. of intest. is
of the nature — sometimes a ringing of them cont.
a catch a pain that then
is we call flatulency — in this
kind of spasmodic cont. of pain is
aches, pipes from one part of the
intest. to another, is not permanent
in any one part — there is no
danger of mistaking this for inflm.
of intest. — a third. we are at no
loss for employing stimt. in this case.
the cont. spasmod. cont. effects
are only in the case of pain
is cont. in one part — a very violent
inflm. of the intest. may rarely be
mistaken for this spasmod. cont.
Very powerful stimt. are necessary to
take off such cont. but these will
do a great deal of harm in inflm.
of intest. — We must therefore be
careful not to mistake inflm. for this
spasmod. cont. — Stimt. are employ
same in cases of weakness of
intest. — Very mild stimt. will sometimes
be sufficient to prevent any flatulency — and
by the help of whole of the acts of intest.
probably will tend to strengthen them

(2) It was the practice of the ancients to employ enemies as spies for this purpose — as Pepper in the Plurality — Instances have actually been complained in modern schools and also a claim. 5th The ancients were not prejudiced against Moral Obloquy in employing of the Therapy — The Pythagorean School — Democritus & many others of the Practitioners have stated certainly that prejudicing such treatment — and even Pam Dilmon before his time ——

but if we employ too powerful stimulants we shall weaken instead of strengthen

Lect 25th Stimulants cont.d

The purposes for which we employ stimulants but only when usually are as follows viz. to rouse the sensibility of persons in inflammations as they are found to be useful to prod. suppuration & mean to accelerate gangrene & mortif.n But still there are cases of inflam.n where stimulants may be given advantageously —

In the 1st Gill in erysipelatous inflam.n Erysipelatous inflam.n is difficult to distinguish from phlegmonous inflam.n and therefore may be cured by the same means. Stimulants should be exhibited in extensive erysipelatous inflam.n of the throat or pulmonary organs attended with ulcers, with fœtid effluvia

In cases 2d Gill in inflam.n of internal parts of the body, stimulants by general & especially circulation and by the vital & stimulating & by taking off inflam.n

14 Alterat. consist by giving tonics in some species, or rather of small in inflam.n of the lungs, the patient may be thereupon into a profuse sweating & discharged off yellow urine of any fœtid acrid smell & stimulants in these cases they are principally at least 2 things & these are antiphlogistics & tonics In cases of

a Pity proceed from ignorance & affect
ye health & ye good of ye pat. in
wh case they are more fit to
end ye pat. than ye force of ye aff.
of ye heart & lead. & ye cause more
ye pat. to have fair good. Fund
have been employd to prevent the
return of ye paroxy. & indemnify &
when joind w. relax. & pain are
compet. Dose — by rheumatism
the nat. cure of ye dis. is an
evacuation of ye aff. — that is
ye — but in many ye cure —
more Dubt. Dis. & ye 2 — It has dis.
been cured. Strength in this dis. as
perhaps to push up ye fever as it has
call'd in this case is a sign of fitch —
neither be left it rise too high — fall
as low — by rheum. when there's nth
consid. ye — dis. — Drawing and

surging also stimt. have been ofd.
with an intent to spread & circulate on
the surface of the body — & where there
no defe. of fibre infln. & consider. weak
stimulat. the growth of hair goes
to extreme, stimt. cure somet. and
the speech somet. me with la-
forward suppr. & then stimt. may
be used both internally & externally
to the part — When sensorium bra
& nervous place stimts. may be given
internally & also strong applied to
the part in order to produce inflm.
round the dead part & occasion
exfoliation of the latter — In
relaxat. stimt. are useful to produce
good suppr. & of course the growth of
granulations — They have been
in tonics & relaxing appl. to the part
that for this purpose —

The suggestions are also used
to carry off the green and lymphatic
but these somet. be useful
but they generally do a great deal of mischief
prolong the paroxysms & intermitt.
& cause them to be more frequent
& diminish the relaxat. in contin.
fevers &c — In spasmodic
affect. it is for want of suff. action
they carry off a particl. part to make to
irritat. — By stimt. we can produce
a total act. of every power & thus
the effect. incapacitat. of rest.

(a) The astringents of the metallic kind, especially Zinc, are most efficacious in the Chor. Sancti Viti. We have been told of several cases in which zinc was successful. —

G. M.

~~(a) Devotionaliense~~ —

(a) While ye. hem. e cont.ue they ch. ought be used certainly, but when that discont.ue & the Stubornness not return, they may be advant.ly employ'd. See Sect. 15 Chron. Dist. in Apoplexy.

In spasmod. contract. the stim. are employed, tho' successfully in tetanus of present spasmod. hysteric affection — In epileptic spasm, it is temporarily, if they are useful — which in perfect epilepsy, or spasmodic paralysis also rarely, if they are of any service in tetanus — for they have been by some as remedy applied in it, yet Dr. F. never saw any advant. accrue from their exhibition in chorea Sancti Viti, & other spasmod. affect. of the mind —

Stim. are employed, the one in lieu of present spasm, the other to render the patient more docile & tractable, & more liable to spasmod. complt. — Again in stupor, (of the species, are apoplexy, coma, & lethargy) it often happens, if the dis. arises from plethora, or from some sudden shock — In the convulsive, in the first case, as also in syncope, as they tend to unconsciousness — In apoplexy, the dis. arises from effusion of blood in the brain, stimulant tend to end the dis. from effusion in the cerebral vessels — In other cases, stupor — It must be observed, if the pulse is remarkably, it often happens stupor continues — In Vertigo & lethargy, the same are employed

of a debility of the nervous system constitutes a
drying and cooling — & feeding also of
constitution of removal of its causes
In these cases by cutting of stimulant we
can restore a healthy & natural action to
the parts ~~& also~~ their action of course
After them any Stimulant for the time
the removed, when surfeiting
anxieties & any other accidental
stimulus may be discovered which
in point, when it affects the interior parts
of the body, stimulant diet & medicine
stage of exclusion appears — In cases of
obstinate of menstruation, stimulants will
from occasion their reproduction
Instances of their in insanity case
Cannot concerning of a disease — as gen
in Gout — rheumatism — epilepsy — mental
affection &c. —

Lect. 26th. Stimulants cont.

The 1st class of stimulants represented
by, is a natural class id. by Linnaeus is called
Didynamia Gymnospermia — by Tournefort
irregular flowers — They have fruit in
in pen. Some of them have only 2
of rudiments of the other 2 some of the
the pistil of stamina are longer than
of the other 2 & some be equal — There are
flower classified is divided into 2 leaves — the
upper lip is commonly longer & open of stam
in the form of a hood or of flowers
preceded by the pistil — it have no corol
but of tube of the flower — A real idea of
class has to be taken in case of the
there are exceptions. — The fruit

These plants have their system
power depend entirely on the essential
oil which they contain — it is diffused through
the whole plant, but more particularly
in the flowering tops — As we can't
have these plants growing all year,
it is necessary to preserve them, which we
do by drying them — When we
want to dry any herbaceous vegetable
the water is the activity probable cause
of our bias show one of 2 or 3 hours,
and if spoil not only the greatly
dry — but its juices in some degree exhaled
then it should be kept in the dark, in
a heat of 90 of F — Otherwise — the light
destroys the property of plants very much.
in drying — the Marshall Giant at least
in flavour

catalogue — Betonica — Lavendula
Mentha sativa — Melissa — Calamintha
Majorana — Marrubium vulgare — Origanum
Dictamnus albus & Pondaminat — These
have been esteemed as useful in diseases of
the head & called cephalics — The following
have been called pectorals — Hyssopus — Hederaceus
Teucrium — Polygium — Thymus — and an
idea of certain virtues was formerly in the
certain parts of the body — but this is a
trifling division & there is good ground
for Mentha vulgaris — spicata — Nepeta
Marrum Syriacum — Calamintha — Scrophularia
Nasturtium — Salvia — Chamedrys — Scordium
~~are called~~ But of these last are called
antiparaliticks for of these plants [illegible]
Besides these mentioned in the following
catalogue there are a great many others
which have been in use but many
are superseded than its worth while to have
a list of them in the Materia Medica [illegible]

Although we might suppose of some
experiments will not be agreeable than we
dry them in a hot, warm & cold place
yet we find the reverse take place.
Besides by drying them quickly, some
[illegible] are generally [illegible]
[illegible] them [illegible] [illegible]
[illegible] process after it is gathered & allow
[illegible] its virtues — Next to drying them
in 90 degrees of heat, where we can, it is
better to dry them in a heat between
75 & 75 degrees — for below 75 and in the
north degrees [illegible] that — ~~[illegible]~~
for in great cold climates [illegible]
nor do the plants [illegible] — [illegible]
preserve them in 2 ways 1st by [illegible]
in which [illegible] above [illegible]

(1 Distilled plants with water & spirit
oil chemes extract of water & spirit
are a proper guaiac, Rhubarb, spices
& tops or galls & bottom according to
specific gravity — The water is mix-
-ing supplied with a consid. quantity of the
[illegible] called distilled water
if they are distilled with a mixture of
alcohol & water & spirit oil contains
[illegible] portion of the water
[illegible] water alcohol & spirit
oil is called spirituous water a very
improper expression — No proportion
of spirit oil is dissolved in spirit
water it is called an essence.

shall get to them — By this means we
may preserve them any length of time
which well dried — 2d. If time admits
opportunity of gathering fresh every year we
may hang them up in bundles — and
preserve them very well for a year
We said, the virtues depend entirely on
the volatile oil in them — We may also
Distill it (a) — The fibrous part
in most of the Didynamia is in a
large proportion a simple Green
substance — We take 3ij or 3iij for
a dose of a very light powder, it is
in hardly possible to get Cost to take
they have been employd to promote
digestion, as stomachics, &c — Mint
thyme — sage — wood — Wort & Germander
agreeable to the stomach themselves
being low Herbs are vehicles for the
subtle aromatic principle — as common
mint, peppermint, &c. — Fennel
Green — They are Demulcent as well
for other uses — Peppermint is used
to the effect of flatulency as well as stomach
& bowels — but they are hazardous
sufficiently stimulant — & they are not phlegm
through in the Cholica Pictonum
for Spasmodic part of disease
They are useful vomits in weak
of the intest. respect touch of them as
a bitter juice — as Calmia — Teucrium
Chamædrys &c — some of them co
a consid. quant. of bitter — like Quassia
among the Labiatæ — &c —
in Mint &c. are scarcely of a

(a In rheumatism most. They are not sufficiently powerful

They have been simple in India & brought for Mint & Balm & some others as common drinks in Spt. — Their remaining the idea of carminatives & cordials but all the Tribe add so much stimulus as to be very unwholesome & agreeable to the Stomach — the fine fragrant parts evapt. & leave an hot & coarse residuum — Tho' their Virtues may be made use of in infusions as drinks in Spt. — nor they did not invent acquisitions of Spt. sometime some nutritious & the Tribe They have been simple in Rheum. in the infusion effect. fainting & lowness & the Peppers & Spt. in Dis. — they are quantities wid. especially Rosemary & Lavender & Sweet Origanum Majorana & others of Sage antispasmodic powers — They are not in use in Rheumatic affect. — nor in apoplexy nor in any case of nervous nor gout — not to stimulate nor in flame of skin — so that they have chiefly been made use of in affect. of the prima via & Pulegium & Hyssop have been used practically as pectorals — Marrum Syriacum Satureia & Pyrethrum were — counted as cordials but are not near so much in practice as they were formerly.

Have taken Brutus of the Vatica

Medica & consid. their effects & acc
of. of their med. use make up a gen
further Chart this class of med. for
care of all dis. included by of humo
lately mentioned further than Colonia
for use friend wanted to it by Author of
prod. suff. to cure all dis. but this
very far from being of cure — There
in fact nothing we can depend on
so little as of ~~Vitiated~~ notes of med.
said known by Authors wh. I have
written on the Materia Medica —

Lect. 27th Stimulants continued

The most class of stim. is a
~~[illegible]~~ ~~[illegible]~~ ~~[illegible]~~ one
very natural ~~[illegible]~~ called by
Linnaeus Umbelliferi — They form
a part of the class called Pentandria
Digynia — They have 5 stamina
& 2 pistilla — but they are more partly
remarkable in each flower being
placed at the top of the flowers, and
a no. of these flowers stems ~~are~~ being
together and at top of a large one — They
are called by general Umbellifers, Plants
in most of them these stems of flowers
supported by a stem are fixed at top
of a still larger stem so as to form a
double umbella — each flower is
followed by 2 ribbed seeds wh. are flat
on sides applied to each other, on outside
just the reverse on the other side — The
class of plants containing these different
medic. juices — 1st a stem of them wh.

(2) Ceux venus avec Dieu, Vivent et
ne restent en deux mondes

those virtues we shall not appear
enter into) 2d an antispasmodic
one - as resin. subt. - Sagapenum
Opopanax - Asafoetida - Angelica &c -
& 3d a poison. juice - as cicuta - w. Pres
- and in bud. but scarcely ever any
succes - The stim. & essential oils,
is neither near inflam. nor uneasy.
The plants containing it, as enumer. in
Dr. Cullen's catalogue are Ammi Ammoni
Anethum - Angelica - Anisum - Carum
coriandrum Cuminum - Daucus
Creticus - Foeniculum - Hipposelinum
& Ether. cont. same & of antispasmod.
resin. matter as ~~does~~ do, Levisticum
Pimpinella Saxifraga - Seseli Massiliense
& Silen Montanum - These are
incl. thus of same natural class w.
have similar virtues, but there are a
g. many more enum. than we use
- Those we ~~em~~ play, are principally
Anethum - Anisum - Carum - Coriandrum
This g. yields lib. plants w. cont. g. quant.
oil in g. greatest quant. as these can
only be obtained recent at some time
of g. year, it is necessary they sh. be
preserved - To preserve seeds pull up one
sh. gather them when fully ripe - & when
dry g. seem ready to shake on the ear
or 3 hours - & instead of putting them in
a dark room, we sh. spread them in
g. sunshine for 4 or 5 days (a)

A Strawberry such do not cont. live
more than a month or 6 weeks.

contribute to the analysis in the said preserving the respective of the whole — this is given much confirmed by exposing them to the sun for some time after they are gathered — The life of the chemys contribute very much to the preservation of the seed by preventing fermentation in it — This life is very various in different seeds — because it does not continue a month or at most six weeks, others a little shorter time — while in others it continues for 12 years — The seeds of the mandrake & widow may be preserved more perfectly during the time — The seeds of Humbellifer plants continue alive about 2 years — When the seeds of a plant cont. alive for one year the plant grows in moist countries & in both while keeping them long for medicinal use — Their virtues depend entirely on the spirit & oil — in distill. — It is some time employed. Their distilled & spirituous waters are commonly made but not so often as those of the Lidgnamia — They may be employed in infusions or extracts. The principal purposes for which they have been used have been for agreeable & pleasant drinks — Being natives of cold countries, they have formed the natural spices of those countries.

Umbelliferous plants mostly grow native
in cold countries — some of them are
found in the very warmest climates,
but not so fragrant by much — gen. those
affording resins — yet — as Asafoetida
Gum Ammoniac — Opoponax & Sagapenum
They have also been found useful as
vehicles for other kind. — in a nauseous
to the stomach — They have not been
to much esteemed in weak habits.
They have nothing of a purgative
power, except Frost. Have anti-
spasmodic resinous juices — by flatus
They are the best antispasmod. an
stimulant tonics we can employ especially
in those flatulent colics arising in infants
for want of distilled water of Dill-seeds
or Dill-water, has been particularly good
effect not tending to weaken
the intestines so much as the warm
spices & but more cert. in their
operation than Valerian — They have
also been employed to strengthen weak
intest. — Sometimes in Dysentery & prolapsus
ani — & in gangrene also for
same purpose in pastilles — Gum
has been recommended in this case
but ~~not so~~ hardly useful internally
neither in gout nor rheumatism
nor in spasmodic asthma — The resin

subst. of some of them afford are among
the most powerful anti-spasmodics we
have — They are not useful in cases
of stupor, nor quite useful in cases
of skin where effects are principally in
spasmodic affect. of the primæ viæ.
For this purpose they would only be
of wide use of — They may not
be appl. externally, as of Ven. oil
may be. Any common plaister
may be applyd to the skin of the abdomen
are often more powerful in taking
off flatul. of this way than when
taken internally — We may use
them externally when we are afraid
giving them intern. — In cases of dyspepsia giving attend.
with consid. flatulency they are peculiar
useful externally in the form
of plasters applied to the abdomen
with consid. advant. when these
stimul. would be bad if taken
into the stomach.

Lect. 28th — Stimulants cont.

The next class consists of a new natural
class of regulables, which Saunders calls cruciferous
plants, & Linnæus tetradynamia — These
plants have to stamina of the 2 long
shorter ones — Their 4 petals are
placed opposite to each other, and
flower in racemes or spikes in the top

Facies. But these characters are
constant in all the species of this class,
which are very numerous. Those which
are enumerated in our catalogue are
Alliaria — Cochlearia — Erucaria —
Erysimum — Lepidium — Nasturtium —
~~[illegible]~~ Raphanus Rusticanus —
Sinapis — We have also, I believe,
Iberis in this country, viz. Raphanus
Rusticanus & Sinapis —

The Alliaceæ form a very natural
class of plants, each plant having 3 — 6
or 9 flower leaves, whose seeds then
up but one cotyledon — Most of them
contain pungent juices, which are also
emetic & expectorant — Allium of
which there are about 50 species contain
a stimul. & essential oil, whose passages
are perfectly similar to those of the
tetradynamia — The stimulus of these
plants depends entirely on the
essential oil, which is so very volatile
~~[illegible]~~ cannot be preserved by drying
& Moist. we very use them recent
or they are preserve them if either
by keeping them in a dry place or
if it be the root, burying them
deep in sand — If the plant
very deep they will keep, be green
alive for several years, and produce
when brought near the surface of the
earth — The mangel wurzel, the
seeds which are preserved from frost & cold,

a Mistake has in this case been made whole by which means the action is continued a longer time

in cash lessening disease — Otherwise
it is in the diff.t one preserve these
plants — sometimes they have been
preserved by dipping in their juices
as much sugar as they can dissolve
they are excell.t after fall into ferment.
do not keep well in this way —
sometimes they have been heat up to
3 times their weight of sugar — in
we call a conserve — But they are
rarely tr.d and there in this form
their stimulus is very uniform
& but little inflam.g — They are
after trad. useful rather than
phlog.c in fl.n — They have been empl.d
to promote digestion — as mustard &
horse-radish — garlic & onions — They
are most natural in old constit.
chiefly growing in cold climates.
They have sometimes been
imp.ly affect.d by hemp especially allium has
a power of selection as well as genera
of general irritat.n — In those cases
wh. arise in the winter in such climates
as ours attend.d with little inflam.
allium has sometimes been empl.d with
success but it is too stimul. when
there is any deg. of inflam.n about the
breast — They have sometimes (especially
of tetradynamia) been empl.d in
rheumatic affect.s internally, a
They are very properly empl.d in
cases of dropsy & palsy especially hemiplegia

(a) They are also among the best stimulants that we can employ to excite inflm. of the skin as they have an irritg. infln. only in ordg. without to suppurn. These are 2 cases in wh. they are preferble to cantharides. When we want to inflame the feet or hands, or where 2 parts touch one another, this can be effd. in more advantageous than cantharides. In hetts. where cantrs. are apt to produce violent strangury, we inflame the skin by means of these as they produce the same effect —

after their is no further chance of
hemorrhage — in the case of
palsy also in cases of lethargy, when
the last depend not on fullness of
the vessels — when a fault of the nerves
resulting taken off these are among
the most powerful stimuli that we
can use (a) ——

We are next to consider the respective
qualities of the juices of trees, as balsams
resins — they are by no means
alike of the juices of whole tribe of
them ~~the whole of them are~~
being found in umbellifer plants
which are herbaceous — Assafetida
Gum — Ammon — Sagapenum — Bdellium
are all taken from umbellifer plants
which are herbaceous — and most of
the other juices — some are simply
the tree itself, cracking the juice by
boiling it in water; in which case
the resinous part is brought out
with the mucilage juices — the tree
we employ ~~employ~~ in this way
are Abies — Pinus — Juniperus & Thuia
Cantalum — Guaiacum Sassafras
These differ as much as they can
in their natural history — but many
more have been used, but these are
almost the only ones that are used
at this in this respect their properties be
nearly alike ——

Sept 29th — Stimulants cont.

Resins, which are usually procured from inspissated woods, Stimulant, but also partake of the expectorant — so the Ammoniac, Sagapenum, Galbanum, Opopanax, Myrrh, Olibanum, Asafoetida, Gum Ammoniac, Bdellium, Galbanum, Opopanax, Sagapenum. These last five are obtained from the stalk of the umbellif. plants by cutting the plant to the root. There rises a milky juice which is gathered & left to dry afterwards. These are a strong, resin. subst. & bitter. Gums, these are mucilaginous & bitter — but there are a different nature & what are meant in use — These resin. subst. may be combined in solution same of them, as Gum Ammoniac & Asafoetida, in one natural mixture. Difficult this regard — But such are not natural mixtures of the matter, shd be, prescribed separately & in combination, if imagine them in a

substance — such of them as are sol'e
in alcohol, may be dissolved in it
so as to make at least ~~a quart~~
~~weight~~ a saturated solution of them in
2 then poured into water just at
the time of publication of the water
precip. then dissolving fine particles
& mixes them a milky kind of
fluid, when the resinous matters
may thoroughly diffused — The stuff
of these is ~~[illegible]~~ in glass tubes
when empty internally, they do not
prod. their effects immediately, but
when they get into the blood-vessels
& are applied to the various exhalent
parts of the body — their action therefore
is not immediately while they are in
the stomach — Wa[illegible] & coll. substitute
them some time before we can
expect much effect — & steady applyg they
also tend rather to prod. phlegm in the
stomach — They are not useful
in prom. digestion — or nat. activity
for other purposes but on the contrary
some of them rather disagree themselves
with the stomach & regard of other stimuli
ch. be mixed with them to make
them readily agree with the stomach
& last they may be a very disadvantage
in cases of weakness & flatulency
where there was no disposition to
the great flow of the secretions, in
manner — nor of the reasonable dos

[illegible] Queen [illegible] Ones [illegible] [illegible]
[illegible] for [illegible] [illegible]

in men — In other cases where
there are much mucous flatulence in
the intestines, they are useful here
in preference as Cathartics — Sagapenum
& Opoponax have been particularly used in
this case — but might they have been
employed internally to forward suppuration
in Abscesses have been called warm
plasters — as Galbanum &c. —
In epulcerations they are useful in
instances to promote the growth of healthy
granulations & good pus & of granulations
of granulating flesh — Ointments are
less complicated, & they are
almost thrown aside by Surgeons
but very improperly, for in many
cases they are very powerful & of
internally they have also been used
to promote good suppuration in internal
ulcerations especially in the tonsils & various
passages — Myrrh has been particularly
used for this purpose — It is very useful
in ulcerations of the mouth, nostrils, or
throat — or indeed in such as are
external, a solution of it in alcohol
diluted with a little water, & then
applied (or even with such other
substances as serve, especially in
which the absorbent of pus, &c.)
In fact they can hardly be made
use of as stimulants, but in
in indirect manner they have been
successfully employed

1 a They are by no means perfectly textile in fol.

as Guaiacum &c — They prod. of
kind of convulsive and violent action
of the muscles and tetanus &c. in of small
quantity of the dis.e — Some of them
have been given as antispasmod.
as Asafoetida & Gum. Ammoniac.
(which we shall consider in of class
of antispasmodics) — They are
very improper in any case of
tetanus — Their of inflamm of digestive
viscera, their excited of improper
to be used in such cases as apoplexy,
palsy, vertigo, lethargy &c — They
are among of most useful stimul.
in attempts of narcotics as pretend to produce epileps. inflamm. &c.
Some of them have been given
as expector.ts & others (the inspissated)
as diuretics — They have also an
astringency which has occas. their
being employed to check secretions
~~with right~~ Balsam Peruv. — of
~~Copaiba~~ Copaiba — to check
secret. of mucous mem. of lungs, urinary
passages &c. & secretory vessels
in gen.l — Bals. Copaiba — Gum. Ammon.
& others to check loss of secret. on
the mucous glands in gonorrhoea
& other albus, & other mucous secret.
of mucous membr. of urinary

passages

of Pipe remarkable of this Fruit
has been found in other parts of
said Gardens of Ireland & Scotland but
not in this any Tree or Kernell hardly.

Sarsaparilla — Lignum Guaiacum & Sassafras albidum Sudorific. & this has been particularly used

Lect. 35th Stimulants cont.

Aromata. These are taken from plants, which agree only in being native of warm climates. Some of them are the very same herbaceous plants of no particular natural class. There are some of them, which have a less degree of stimulus, which are enumerated in our catalogue — some particulars, as the Cinnamon — Cassia lignea — Calamus — Zedoaria — Serpent. Virginia — The Aromatics have been more particularly called spices, are of Cortex Cinnamomi — Capsicum These are barks, & general spices of flavour, and indeed it's hard to distinguish of the cinnamon from of Myristica — Caryophylli ~~are~~ are of flavour of a tree which grows in East Indies & which of nutmegs mace & are the fruit (a)

Mace is a membr. of small of fruit — It has been brought from Calcutta by the French —

The Nutmeg is inclosed in a thick green coat like of a walnut. The high medicinal virtues of nutmeg alone & also before the use of these are of prime species of the East

Dimento is the berries of a tree
growing in the West Indies, & nearly
the same properties as the
Pimento mentioned — Canella
Alba — Cortex Winteranus — Cascarilla
are the barks of American trees, & besides their aromatick essential oil
contain a bitter juice, & are therefore
considered as more strengthening —
Zingiber is the root of a long herbaceous
plant, growing in the East — Piper
Nigrum & Longum are also the seeds
of aromatick plants, growing in
Sumatra & the Antilles — Capsicum
is a seed of a plant growing early
in the West-Indies — It is hardly ever
used to be made use of in medicine
It has been chiefly — employed in —
cookery for its hot & stimulating spice
Cubeba — Cardamomum Minus —
Grana Paradisi, besides their stimulating
have a deg. of bitter (tho' but very
small) & has also made them be
considered as agreeable to the stomach
All these have their stimulating properties
entirely on the essential oil which they
contain — This essential oil is in very
quantity, & they may be employed in
infusions, in gentle tinctures & in
a very small dose. Essential oils are
distilled separately from their spirituous
or distilled waters

of their chemices, that is their spir.
matus infusing, or a larger quant.
of oil by dissolving it in them
We may also use them in infus.
of chent. oil be. brought out of the
mucilag. juices — If we digest them
with water, their stimulus is
very quick in its action & soon
pervades the whole body — It is an
inflamm. stimul. — In this they differ
from universal stimul. ~~quantity~~ in
general for their action is solely on
the stom. when exhib. without
delay of time, they get into the bl.
vessels their action is over
They have to be found the
digestion, for this purpose they
are most useful in warm cli-
mates for here over they are
natives) as the inhabit. can
hardly digest their food with them
in control. quant. They have to
be used to render prod. agreeable to the
stom. in wh. case they are very
useful when their inflamm. stimul.
does not lead to the Patient
In other cases, they are perpetual
enough as a medicine for
their need. — They have an
disposit. to keep up a constipat.
action of the intestines — and
therefore are not applicable as laxatives
in spasmod. const. they pain

and they are the most useful stim.
either in flatulency, or the colica
Pictonum — indeed when there
is spasmod. cont.n in any part
of the intestines, there are scarcely
any other stimul.ts we can
depend upon — but in the hurry
they are of most importance of
any, if there be dis.d subsequent
spasmodic contraction, but not
inflam.n. We must therefore be
certain of the dis.d before we
employ them, in which case
such of them as have little bitter
juice must be the chief, and
have been found some time of good
effect, especially Cascarilla in cases
of lingering fevers, causing merely from
weakness of the intestines. They
tend to throw off cutaneous
eruptions of the head, & to take off
flakes of blood from the intestines —
Gentle stimulus from their stimulus. They
have been found in empirical cases
of inflam.n of the throat, which has
been called the sore-throat, attended
with ulcers, with considerable
in these cases, hard, then Barks &
much more powerful are
have been with the greatest
success, in suppressing these
stimulus, in cases of

a Pain same in ulcerated
prostate substance in ulcera-
tion in case they are also less
applicable than the resinous
stimulants

b But in this case they do harm
as they only increase the freq.ty not
the strength of the pulse

but they are not so useful as I
could wish — In Jaundice
I most often have had the same
complaint, the said fact — They are
not useful after Intermittents, in
any other Disease. — In Gout
they have been given to prevent
the return of the paroxysms of
intermittents — for wh they are
among the most proper to be joined
with Opium & Calomel — In conclu
sion they are very ~~[illegible]~~ in
[illegible] literally of Patients
a sweat — We shd have many
of in internal inflamt. as Pleurisy
& peripneumony they have been
used also for the same purpose
with good in the second stage
of each disease — They cannot force
a patient into a profuse sweat, & if
is cause [illegible] — Must for once the
they are useful they do more of
perhaps 20 times ~~[illegible]~~ they are
be very properly laid aside in
these cases — It was a practi
of the Greek school of med. — for Pleurisy
and Spices very much followed
in Germany in Gt. Br. — for
[illegible] of the [illegible] Spices are
very much used in practice
this country also for 300 years ago

In the time of Sydenham they were almost universally employd. at the end of fevr. — After the time of Sydenham the use of spices gradually declined to support the strength in the latter end of fevr. are at last totally rejected in cases of flatulency hard. low. &c. and a few small doses of spices may be employd. advantageously — but are commonly adulterated — as they render the pulse more frequent & full instead of stronger, they therefore deprive and support strength — Acids given along with them in some measure correct the effect but not so as to render them of any use — They are not dispensed to be employd in rheumatism — In gout they act very quickly, they are also sometimes the good effect — In hysteric affection (hence) in weakness of digestion gency, the use of them, the strong present partial relaxation of digestion, and acat. dispe. effects to return more frequently than otherwise — They are also employd in any case of acetous fermentation, although, as indeed all other inflammatory diseases are in gout, which it falls on the internal parts, they are the best stimulants we can use as they act powerfully & quickly — Depend. Diseases [illegible]

in this case but it seems better
to guard the warmer spices, as Cloves,
Nutmegs &c — The Genus Pro
dispotefe to feed of ignorance — or
are fitted of all applied to aqua
ingredients — They tend to feed
the Stomach when affected with
Flatulencies are so very similar
that these hardly any choice, except
of some are rather accidental, as
Calcium — Pepper — Cloves — Nutmegs,
Cinnamon — The small quantity of
Cinnamon — some of these
better cont. in some of their
must be considered as having moment.

Sect. 3d. Stimulants.

The methods of stim. include
Balsamita — Cotula Foetida — Alum
Formalium — Malabathrum — Nardus
Gallica — Indica
Properties ascribed to substances
in Treatises on Mat. Med. are
so little to be depended on yet with
some experience of effects of a few
it is hardly proper to consider
at all its effects —
We have inserted in our
catalogue a class of medicines
Dr Cullen has not taken in his
catalogue — We have already mentioned
of the different Stimulants & recommended
the use of the excess we are concerned
and yet in many instances it
may be disputed whether such
substances are!

as Linnaeus has by Systematically putting
of names of new plants - but strangely
unhappily, because if those names
given then commencement adopted
there will be still greater confusion
with regard to synonymes of new then
there was before.

The medicinal plants contain juices
which have to be considered as possessing
these are many of these as horse radish
carrots, parsley, dock &c. others as well
as the genus of celery, parsley, fennel
&c. are used as food. By accident
they have been gathered instead of them
which have been mistaken & have proved
poisonous — some few of them
have been employed in medicine. amongst
the principal have been cicuta
Stalk, Lemnous has been called conium
maculatum & cicuta aquatica (as
Pharmacopoeia & kinds which we have
used — there are a great many others
of genus which contain the same
kind of juice
Thirdly, the natural class of plants which
in Linnaeus's system is called de
class of pentandria monogynia
Pharmacopoeia & some of them which are
used in medicine are belladonna
hyoscyamus nigra — stramonium
The effects of these class depend on
the medicinal matter rest on
a fixed oil — the medicinal
matter may be preserved by drying
the plant or by a distilled juice &
vapour of water & it may be by a
extract — that is, by infusing the plant
in water & evaporating the vapour of
water from it till what remains
near the consistence of honey. Some make an extract
with alcohol & solution by evaporation

in the first place, & afterwd. by pouring
boiling water on the plants, & letting
them stand together an hour or
two in a heat somewhat less than
boiling water — Then they are
to be pressed out, & the water afterwards
evaporated in a fluid bath, consisting
of a saturated solution of salt in
water — Pre evapn. is to be made to
take place quickly & with an
equal degree of pressure — Now
the immediate effect when they are
thrown into the stomach in a quantity
suffit. to produce a great effect on the system
is perfectly accordant to the opinion taught by
as to the way the Patient, the pulse becomes
frequent at the same time — If they are
taken in a smaller quantity they
evidently stimulate & produce frequent pulse
& strength of the pulse for a day — or two
Whenever they are given in a dose
not sufficient, they produce no sensible
effect — The effects in this case does not
seem to be on the stomach but after
they are absorbed into the blood — but
when large doses they bring on frequent
of the pulse, & giddiness — Sometimes
when the Cuticle is thin, even small
doses produce a rash — Persons
who are subject to any of these symptoms
the effects of them frequently to some
inflamm. arises the skin and

of them wh. be already ann. ulcer.
their influence in it an infl.ce of prod.
good suppur.n & granulat.n — Their
stim.t also tends to evacuate absorption
of the place so as to occasion the rapid
removal of the matter — it has been
observed by some — their disposit.n
to prod. good suppur.n in cancerous
comp.ts very commend.d — the D.r of
never can cancer cured, but
the use of them — they have been
in use with little intermission a long
time to cures. The absorption of the
matter in sinuses — in indurated
tumors they have now & then
been successful — this cert.y has not
worth while exhibiting them for
almost any of these purposes ~~[illegible]~~
~~[illegible]~~ for fear do not have them
in such quantity as to affect the system
they do not if ulcer — and if we do
there is a chance of destroying the
patient for affection of the brain
It is very seldom if we can cure
ulcers by means of them, with
we cannot cure by others w.h do not
~~[illegible]~~ of same danger —
There is enough further classified w.h are only employed
as their stim.t is too rad.t to be
used internally — as arsenic
intermit.t depends on a very violent
spent.l act — not the sort of thing when

Sud., is merely farinaceous — or rather mucilaginous matter) cathartic: bitter — imperatoria — pimpinella anisum — hypericum — sedum minus acre — staphisagria — all these are empl.d only to excite inflam.n of the skin as stimul.ts — but they are seldom laid aside as we have much better stim.ts for this purpose —

There are the various stim.ts that are taken from vegetables — the stim.ts taken from animals are but few & these chiefly from insects — these millipedes have been emp.d but scarcely with any effect

The principal or almost only stim.t we employ that is from animals is the stim.t of cheese. which have been just mentioned, in fact — the cooking them out into a sort of vesicating plaster — The stim.ts here, are cantharides —

~~Lect. 32.~~ Stimulants cont.d

Cantharides.

Spanish flies — is a little insect is now & then found in this country — but most frequently in Spain — & in Italy & Sicily — They are collected by people either by persons employed for the purpose of making national employment — &c —

that insects in gen. when dry, preserve
pretty readily, & retain their perfect form. Upon me
the Hardly have expected is, that there
are other insects wh. prey on these &
gen. attack the stomach first & then
the head rather than the body — so that
we shd. choose such as are whole
When in pieces or mutilated they
are thus, cannot consider, in their
effect on the stomach, as a
homogeneous matter — We shd. be
careful also to separate parcels, lest
mutilation may, perhaps, contribute to putrefaction
when it is very material — and
when there is the least of them found
even for a few hours may prove
fatal by not preventing the bad effects
of dis. — Afterwards we shd. dry
them thoroughly in a mod. dg. of
heat for a short time (about 100 Fah.)
& keep them in a close vessel
(as besides obtaining the stimulus of power
in the whole body of the insect)
these employ them internally we
may dissolve their stimulus of matter
either in water or alcohol — It is
best to dissolve them in a mixture
of alcohol & water — Now they have
been commonly exhib. internally — In
the 1st place they have been considered as
diuretics because they have a
specific stim. to the urinary organs
Now it is well known that the kidneys, the

have any specific virtue — but the
neck of the bladder — it is very rarely
found that they have any kind of
effect — They have been also employed —
but not in certain cases for
some their purposes internally
and Dr. G. never used them for any
use — for the action of Cantharides
they get into the blood not depends
on their specific virtue on the neck
of the bladder & is like the animal
poisons — it is to cause a violent
irritation in various parts of the body
It is not uncommon when they
are taken internally their juice
is absorbed for carminatives cannot be
taken glad in consequence — As far as
experience goes, they never do
good either in bitter internally
for in their the juice of them is absorbed
but harmful — Cantharides are by much
the most common stimulants to excite
infl. on the skin, prod. a very
painful inflm. it is hardly
ever apt to suppurate — For this
purpose we employ them in
ointment — Sometimes they have been made
into a paste with water — but it
both more convenient & more
conveniently use them mixed in
oily ointment so as to form a plaister

al. Sometimes it is worth while to
use a little opium — for in those
who have the pain excited by the
cantharides, it takes off the pain, or
lessens it, and prevents the inflam-
mation taking place. In this case
it is the best way to remove
the blister as soon its effect is
properly produced. On the other
hand, we must keep up the
inflam. and then we should use
the cantharides in very fine powder
and vary it by rubbing the
consistence of an ointment of
the opium at the same time; it
is sometimes very useful in this
case — and when the inflam. begins
to go off, a little of this ointment may
be applied, it renews it — Cantharides
may also be employed when a disposition
in the urinary tract cantharides acts
a stimulant so as to produce such
a degree of inflam. as to blister —

constitution

[illegible] the surface of the [illegible] [illegible] called — This plaster lies upon any part of the body, the fluids that [illegible] out of the skin, & [illegible] of fire of cantharides — and this [illegible] skin inflames & the paralytic [illegible] they have sometimes been used in this way with good effect —

Of Volatile Alkali

Volatile alk. is procured generally by the chemical analysis of animal & vegetable but generally animal — If we distil bones, horns or any other part of an animal by themselves we procure volatile alk. very much mixed with empyreumatic oil which is called salt of hartshorn & combined with gas — This partly in a concrete form, & partly dissolved in water. If we sublime it or crystallize & specify it by clay, & repeat the sublimation 2 or 3 times, we get it at last free from empyreumatic oil & it is then called salt of hartshorn. If we distil the solution 3 or 4 times we get it up most free from empyreumatic oil & we call it spirit of hartshorn. When we want volatile alk. to act as an antispasmodic it is often better to employ it in the form of a vapour — This we do by combining it with muriatic acid & subjecting it to general ammonia, [illegible]

* that is dissolved just at the time of
of extinction

* Vol. alm. is y. most universal
stimul. we have — it cannot be
right for us to use it for purposes for
which equally other fluids in y. habitual
use, either to prod. the digestion, or
some other effect. generally on
taking up the secretions of y. intestines
or in passing off y. intestines

spt. gave by quicklime only in this case we must have it dissolved in water, then it is called caustic volatile alkali. Or we may have it cured by passing chlorine through sal amoniac & performing sublimation, when it is called sal. salt of solamoniac commonly for the appetite it is good but in the caustic form — but for internal use, in its mild form. This latter therefore we give it internally, if we should give of salt dissolved in water, than therefore because we are more certain of the dose — for if we dissolve a quantity of sal amoniac in water, it is apt to evaporate, being more volatile than water — If we apply it outwardly it is better to mix it with ~~oils~~ oily substances as vapour, that it forms sooty chlorine enough of sal. alm. This practice to display the salt in a solid form, dissolved in water at the time of the exhibition or a few hours before it.

We may use it either in its caustic form — this so very volatile of itself it very soon evaporates, for this reason we mix it with oils, which it cements & partly forms soap, using about an equal quantity of the salt solution put in water & of oil of mirbane. Some of the inferior spirits of the storage vessels are used to keep up the strength of the

upon such threats appears to be
a good rule, although all the
[illegible] are otherwise proper
[illegible] in cases arising from speaking
words which tend to incite a breach
of the peace by the violence of those
who are offended thereby.
The business of a weapon
of offence, as quoad hoc has been
[illegible] in the Courts, notwithstanding
a useful brief [illegible] upon
the subject which tends to shew
that although there is a
difference in cases where threats
are made at the time the offence
is committed by threats of it, and
at the time the offence
should take place — although
although there is a
[illegible] in which the
[illegible] is [illegible] in
[illegible] — yet in such a case
[illegible] such an offence, notwithstanding
although there be a difference of
[illegible] — yet in such
[illegible] [illegible]
[illegible] [illegible]
[illegible] [illegible]
[illegible] [illegible]
[illegible] [illegible]
[illegible] [illegible]

[illegible] — [illegible] [illegible] [illegible]
[illegible] of strength [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] — This is the least skin that can
[illegible] in all cases of palsy &
[illegible] after the first [illegible] [illegible]
[illegible] off & [illegible] & [illegible]
[illegible] a very useful stimulant when
the patient [illegible] of [illegible]
[illegible] — This also the least skin A
[illegible] in [illegible] of the skin [illegible]
[illegible] when we want to [illegible]
a [illegible] where we want a [illegible]
[illegible] — it is more [illegible]
[illegible] [illegible]

Vide No 4

Geo. Mathes.

Lectures on the Materia Medica.

By Dr. Geo. Fordyce.

No. 4.

Stimulants cont.d

L. N.o 33

Of Mercury.

This stimulant is stronger than any of the volat. salts. — Mercury has a power of destroying many animals [illegible] which it has been given, and besides this, it acts as a stim. — Crude mercury taken in a large quantity [illegible] lodged in a fluid state, it seldom produces any effect — it is therefore necessary, and indeed [illegible], to render it active — [illegible] it only requires [illegible] to [illegible] matter by which it is [illegible] multiplied & more [illegible] [illegible] then they come in a very small compass. Altho' mercury will not act in a large fluid mass, yet if we divide it into small particles by rubbing it with any viscid fluid it becomes active. First of all it was rubbed down with the saliva — sometimes vegetable mucilages as gums, have been employed — also turpentine, or honey — or solution of sugar, or sugar. Any method that will produce this division will produce equal effects, provided sufficient care be taken. — But that which is more easily rubbed down in ~~a fluid~~ an oily fluid, or balsam of Turpentine, or [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] to be depended on —

Frequency in places, or else dangerous
when as well as internal applied —
Some apply it externally after having
rubbed it down with some balsam or
is necessary to dilute it with an equal
oil, which be just fluid in the nature
of the body — that fluid in that of the
atmosphere — Hay's land is now
prepared for this purpose. Some rub
down with hay's land upon with
balsam it may be sufficient divided
but it is difficult except of hay's land
has to be applied upon? — Now if only
purpose for which hay's land has been
employed alone, was to avoid the
smell of the balsam — but if it is
odd, a smell is produced by the rancidity
naturally lay — Whatever we rub it
down with, we must take care that
rancidity disappears so that none
of it shall be visible to the naked
eye — or even to a moderate magnifying
glass must also take care of the substance
we rub it with does not dry, or
fibres, of particles will remain
fixed simply by division we render
of more active — Seems —
singular of specific in very small
portions and some active when
is not so in larger ones — Many a
supposed of many fossils in Russia are
calcined, or somehow chemically altered
and fibrilly matter of sea

[illegible] gentle fire or [illegible] a
mercurial [illegible] mixture of [illegible]
[illegible] water [illegible] as [illegible] under the [illegible]
fluid & let it stand [illegible] mercury
will fall to the bottom without
sublimation what is more singular
is, that mercury rubbed down to
small particles by mixing it with
a dry powder, has hardly any
effect — Thus tho' mixt with sulphur
[illegible] this mercury & this sulph. has tho'
called a this sp. mineral — the ambr
combinations called a this sp. antim.
the calcareous earth — mercur.
chalcizates — & vitriol. of the [illegible]
[illegible] & these [illegible] made [illegible]
but it is not cured in 24 hours
& they have any effect — The
calcar. with sulphur or antimony are
have ~~their~~ peculiar effect — but the
mercury mixt with them [illegible]
hardly any — Mercury is thus
active in the metallic form
the calces are also active — the
sulph. it is called by Ried — the
red merc. in a flat red in a gunshot
will give it that energy the
strongest purity if the dose be
in a small volume, as not be
[illegible] of [illegible] quantity, and
called into a red powder, red
merc. precipitate — merc. [illegible]

This calcis is also an unusual
in its action, as it has been differently
prepared — Formerly the whole
process was prepared by one person
in London and then it was
equal in its strength, as any imported
Indian — But since it became
a trade, his made effects it in
cost & it has been prepared in various
ways — When we find it in
little flames, it is commonly shading
from white in crystals and when
reviving it to a glass, its pale
color assumes a active appearance
& darkness — Moreover in shaken
his real it is considered like a
doubtful calx — This calcis also
had the difficulty of practice has induced
it to bring its use — Indeed it does not
seem to be material of diff. from
mere calcis-stone — Therefore we
also be calcined by dipolaing it in
an acid principle, the very means of
an alkali or calcareous earth —
A mat. of diff. calcis may be
procured in this way — but being
very uncertain in their specific
although all of them are come
into disuse

Alumina & cont.

Feb. 27th

Mercury cont.

The remain of part of mercury
Mercury is simple, & not of the
which acid — This is particularly lively
the mercury is given specifically to
[illegible] — The Hg are [illegible]
is found, & being mixed with a large
quantity of water becomes of a yellow color
called Turpeth mineral — Mercury
combines readily with the spirit acid of
[illegible] & forms a solid compound when
cold is readily decomposed. The
mercurial salts of the juices in animal
[illegible] it will corrode & sublime
cost. It is exactly of same as if we
injected so much corrosive sublim.
Now take the salt combined form
by combin of mercury & nitric acid
& heat it red hot, it becomes of a red color
& has been called Mercur. precip.
ruber or mer. corros. sub. This pre
can only be occasionally. If
we take the salt of mercury form
by union of mercur. & [illegible] acid
& dissolve it in water and add
[illegible] & dissolve it in
water [illegible] & precipitate this solution
one of forms [illegible] of mercury &
precip. some — in a state of some
in a yellow powder — Now pour
water & wash this precip. well

a Pint of this salt about a fifth part of
a grain is a dose

the quite 2 or 3 times poured thro' it
the remaining acid will unite to
form a salt, wch we call Spirit
of mercury (or) this salt has got
a second & peculiar empirical name
wch honestly yield to mine the mercury
wch without mercury — for of quan
mercury is so small wch if cant
not be found by any chemical
process — Now take twelve minims
& mix it with a little more than an
equal quant of sea salt & perform a
sublimn of oxymuriatic acid spirit of
mercury & the compd sublime
wch we call corrosive sublimate
Now mix corrosive sublimate
oz 4 — & mix weight of mercury & salts
them together — then take the sublime
matter & rub it in an iron mortar
of all sorts of hard metals in order
together, & perform a 2d sublimn
wash off superfluous mercury & sublime
a 3d time we unite the corrosive
sublimate by this means with the
mercury & form a compound
calomel — But take any calx of
mercury & dissolve it in concentrated
acid of vinegar then unite
& form a salt wch has been called
the name of Hedges pill — Prepare
a bath of mercury that name
been quite
Mercury has been supposed to
subsist either in a metal or
metal combined in fixed

a fuscus. qubl.e may be made also
by precip.n by mixing a solutn. of
Sulph.t a sol.n of mercy. in d. acid
acid — Mr. Steinbr. called some
~~[illegible]~~ precip. albus corrosivus —

called sulphur, or it defines an
forms which may called a Mineral — What sublime then may
it form? facilitates inimical — If
if we rule crude antimony
it contains sulphur with corrosive
subl. it sublimes & forms cinnabar
antimony as it has to call it
Both these are the same, except in the
form of proportionally inactive
Cinnabar has the sulph. so much
adjusted in equal of the Mercury, in the
form of proportionally inactive
cinnabar — Internally it has no effect
except there be a superabundance of acidum
sulphur, then it acts as a purgative by
the preparation of mercury may be divided
into those that are entirely efficacious — those
that rarely have any effect — or perhaps
none — It is clear that those that have
seldom any effect, ought never to be
employed — Office, are mercurius vivus
with a dry powder, as with sugar — with
antimony — merc. alkalized & merc.
combined with sulphur & in regular
The quantity of calces precipitated
acids by means of alkalies or quicklime
and reduce in effect them —
The other preparations may be divided
into such as are with difficulty soluble in
water & such as are easily soluble in
The first are merc. calcinatus — merc.
reduced down with the same rinsed
into small particles — and calcined
of tartar — the operation of tartar
corrosive sublimate — the same process

Mercury, yet if more experience (a comp. of mercury & sweet acid of spirits, all of which of these ind. corrosive subl.) be the time they get into the bd. they have considerable a dest. effect on the intestines, & by transpiration, & stimulate them in more than corrosive subl. & therefore fill us. clear. Then if Mercury be insubl. but in the bl. dest. they all have the same effect as corrosive sublim. ——

~~Mercury quad. 2 effects — the opth.~~

Of the Effects of Mercury.

Mercury quad. 2 effects on the system, ~~primarily~~ yields so as to quad. headach, fever & frequently of the pulse, & induce a dep. of the ptyalism, so as to ext. secret. The pr. is one hard soluble in water, & most aptt to stim. the glands — the salts of mercury have a quicker effect than them but the effect of the diffty sol. in water also rather considerably on the secret. but in all these cases, in short, mercury is used as a stimulant. Mercury general, makes a very rough unguent — Mercury is a specific to the ptyalism of the mercurial & dulcis water perhaps — we are ignorant of its effects of Quicksilver [illegible]

[illegible] the worst cases but
I do by no means the cure
of [illegible] The salts of
[illegible] parts of causes of D.
for on the contrary the dissolution
of the main substance when of Pot.
and Soda when there is — The [illegible]
is a best bitter for all purposes for
[illegible] rubbed down in
some mucilaginous fluid, particularly the Gentle
or Calc. sulphuris, or merc.
calcin. or calomel internally.
These 3 have very nearly the same
effect. But we can thus in a much
larger quantity of merc. with the opto
in making it be absorbed for the
skin — For these purposes, may
as we have said to dilute, mix
rubbed down the tartrate, or bad
sulphuret, or the
quantity of mercury we can give
in this way is about 3
half drachms but we may safely go
for 4 drachms at once. Give an
rubbed down in a mucilaginous fluid
about 15 grains in 24 hours is a
moderate dose — but then we
repeat it every day — Give an
merc. calcin. about gr. iij in
hours may be used — If merc.
mercury [illegible] the [illegible] Hydrargyr
24 hours — if the salt be Pot. Hydr.
will about gr. iij in 24 hours

Within all these cases we should
begin with something more than a
moderate one, and should go
gradually and by degrees till we
find the proper effect because
diff. constitutions are very diff. affected
by the same quantity of medicine.

Mercury is in general a safe
remedy if the patient did not
extraordinary weather in the system
we do not know — in order to
cure it, we should think it necessary
to employ it in such quantity as will
bring on a small degree of soreness
of the mouth or a gentle diarrhœa
fulness or pain of the bowels — it will
either of these shewing it's action
new appearances begin to disappear and
we find it, we have then only to
sufficient length of time — the use of
it lately carried a month called it
as least efficacious in the systems
some cases by effects it in small
doses of first, it is very prudent
not to take a much larger one
to the quantity the pt. can bear
it much is not to be included in
the month and therefore we are
to give it in all fine weather
but be cautious till the symptoms of
disease disappear — the bowels
are complete, the pain
action & the cure of the

It matter remarkable of the
ancient ulcers it is rather prejudicial
than of any service — but in almost
every other case of pul.ry it is very
much in accordance good supp.rt &
healing of which in consequence
[illegible] the [illegible] of
[illegible] of [illegible]

dis.ᵗ but they are all so near down
that none of them are even worth
taking notice of — The
irritation & stimulation & a new inflam.ⁿ
and a new similar result with the
glands not distinct, the system should
in the stomach but when it gets into
the circulation — I can see no
harm of the Quinine & the
use should in effect the same
with Salmonᵃ — artificial gastric
crude mercury has been so
long the mere to force forward the
fundamental matters — Qu.ᵗ we can't
not much to this as it may do
mischief but it will usually act
by its weight when the constitution
of the patient in a state of debility
lying down and if it should be
in any part of the world raise
inflammation, medicy will rather produce
a prolapse of the faces than force
— The inflammation has been
used to be followed up the
case this very frequently happens
inflam.ⁿ in some Scarcely
pulent it has been exhibited to produce
prolapsus inflam.ⁿ & prolapsus of
the rectum is very frequently
the little inflam.ⁿ rise on the
surface of the skin in cutan.ᵒ erupt.ⁿ
merely as a very necessary remedy
in fevers & difficult to open little
and dear if it may be found of the

of the same time tend to increase
the perspiration of the skin, so as to keep
the surface of the skin soft — More frequently
it is administered in form of fomentation
and with an equal benefit — Indeed some
practitioners have used it in almost every
kind of cases, especially in those incurable habits
of the nervous — In rheumatic complaints
it is a very powerful remedy, except when
it is attended with a g. i. — It is also
recommended for allaying the irritation of the nervous
system as a natural medicine of the first
rank in the most powerful & efficacious
manner we can produce this of
consequence rheumatism — It is not
useful in any spasmodic affection & it
is especially improper in any case of
stupor — palsy — apoplexy — vertigo and the
gouty patient it is also improper &
where there is any disposition to mania
In all these cases we should be more
cautious with the employment of it
indeed in general it is absolutely
necessary — but there is no doubt
but we should exhibit it in these
cases, as it has in many instances
brought on gout & mania — It
has moreover been a good effect
attributed to it in cases of
considerable efficacy in matters in
the stomach — We not only dialogue
but moreover prescribe it — It
has been given in special cases of

(—) is a powerful purgative in obstruction in the bowels, it is useful of only certain remedy —

J. M.

stimulant, promoting a crisis — Many
other medicines has been employed in
such maladies of system especially
more freely than formerly in
medical cases — In other tedious cases
to effect a cure, other means has been tried
to excite a crisis of the skin, & it has been in
certain cases applied & has seemed productive
efficacious — This also a powerful
diaphoretic — Would not act if given
in large doses, but as a purgative, and
in this is effectually applied, perhaps
with antiseptic — When given in
quite very small doses of calomel or
gr. ij or iij in 24 hours, & at stated
periods, we excite salivation & also
often powerful effect, very gradual
of bad symptoms — Quite as a purgative
it is a very simple medicine & not at
all adapted to be used in any case

Lect 35th / Of Sedatives.

Sedatives are such medicines as diminish the action of a part of the body, or bring it entirely to rest — There is this difficulty, viz. the operation of medicines that are said to take off the action in a part, so as to render it incapable of acting strongly, but only while they remain in the patient in a great degree strongly, during the time the action lasting the full force — But it is evident that in most cases where we want to lessen action, we wish still to have the body strong, though we prefer only to moderate it, when we wish to drive the action — Of these we have several sedatives, from which we should be able to take a single one to cure a variety of diseases where there is strong action without debility, or lessening the patient in general strength. But unfortunately our Gods are not numerous, besides their action is not very powerful — Wine but in great excess, if they are any considerable effects in med. practice, change the mentioned, that medicine should call sedatives being so called opposed to fury, some & strong by the ancients we shall enumerate as sedatives, air, tea & coffee — Coffee is a seed of a tree in parts natural in Arabia but has been altered from

[illegible]

a Plyleaves themselves have neither
taste nor smell but a quality of
imbibing the flavor of their vessel.

Tea is scarcely poured in France
by the Natives but offa generally.

G. M.

[illegible] the East & West Indies
Tea consists of leaves of a shrub
gathered from plants [illegible]
choices differently in respect of
[illegible] age of the leaf they are gathered
climate, or soil in which plants
may probably have been [illegible]
species. [illegible] has said to [illegible]
(a) that the called green tea, is [illegible]
flavored with the flowers of a [illegible]
[illegible] tree, [illegible] in the
East and different flavors are given
to all of other kinds, partly by different
flavors. These flavors have come
into universal use in this country
(b) indeed almost [illegible] — Whatever
may be [illegible] of the effects of tea
among people at all, starting [illegible]
whether it [illegible] or [illegible]
was [illegible] in [illegible] so [illegible]
was [illegible]? — Some have
conceived as they have so much
[illegible] of spirits, [illegible]
have [illegible] either of these ex-
[illegible] of cases — But are [illegible]
[illegible] so as to induce [illegible]
[illegible] in [illegible] & [illegible] of
[illegible] at the same time [illegible]
very strong tea drinkers in the world
will have [illegible] sleep — they [illegible]
in the morning, as they have
[illegible] of remains of any [illegible]
[illegible] hungry [illegible] and [illegible]
principal meal when [illegible]
into the blood & there is so

[illegible] of Spirits [illegible] generally carried out
to the Islands — They also serve to [illegible]
the intoxicating nature of liquors and
when a large quantity of Spirits has been
used they have been found of [illegible]
such to ~~[illegible]~~ prevent the bad effects
of it.

Sarsaparilla is the root of a plant which
has been called by Linnaeus smilax
sarsaparilla — It grows in the West
Indies in the South part of America
altho it will grow also in a colder
climate. — It is remarkable for throwing
out from a head which forms towards at
the bottom of the stem very long fibres
but hardly branch at all. Indeed this
distinction of the root of a polygonatum
grows in Canada & some of the more
northern parts of America & which
has sometimes been imported instead of
it. But the roots branches much
more & may easily be thus distinguished. Besides the root of sarsaparilla
has 2 edges & the other is round.
Sassafras is a plant whose qualities
have been very differently [illegible]
Galen it was accounted to cure the
[illegible] dis. There is no plant [illegible]
with which it has been [illegible] by
an unique mixture of a considerable [illegible]
time; & often happens that the dose is
small, just & hard, for a consider[illegible]
quantity of the system, & [illegible]
[illegible] — [illegible]

(a) Pecunia ex jactibus plane fieri
in usu fuisse quidquid Varro dixerit
[illegible] pro Arce aut Aere?
Q. E. D.

weakness has gone to such a height
as to cause a regular Delirium of Fatal
Phrenitis attended with Fever and
Convulsions & Gangrene & Mortification
in the extremities — Sarsaparilla is good for
to take the Effects & Drawbacks — They often
mean well but we cannot take the Responsibility
of Medicines and not have the Patient
fully acquainted — Sarsaparilla has
also been in Dropsy & Scurvy & Pretty Generally
has an Influence upon the Liver —
Sarsaparilla is one of those medicines that
should yield their Respective Properties
in proportion to their quantum — Their
action therefore is regular and Powerful
when employed in Pills than in any
other mode of solution — Great pains ha
also to be taken to make the solution
of any Importance — Pills require the Powders
mean we should first split the fibres — the
Powders after a little water (either
to moisten them) and a moderate Fire
till they become soft — then reduce
them in a mortar & afterwards Gum
water on them, & Dispose in a Pestle
about 250 Deg. of Fahrenheit for
Honey — But Gum all we do not get
so much equal to the Powder — which
is required in 3j also in 24 ha
3ij will be still better
Physicians we do not pretend to know
a to Dose — neither Physicians agree
it has as a rule — Nature & Disease
is grown natural so much more clear of

A Dr. Hancock's Gage Book of the method
Binding of Death Affect

and more than the thread except they
Sustain — It was formerly the fashionable
by the Chinese Ladies for it was
of gold — The use of Opium rather as
Opium in Chewing it like tobacco, it
gum
is said to have some good effects
preserving health — The same plant
was found in Canada, tho' not
imported in consequence of the trade
to China — Natural Mistake of Gum
there is so large yet it sells at the
soldiers high price — It is cheaper 20
in China where it still comes
the Indian Gatherers — We have seen
Remember the able Dr. Fogg's Dan
tincture of it prepared — It has
been at all events doubtful in the
consequence a medicine — Opium
sedatives have no Period Nothing
Lect. 36th.

Sedatives cont.

The 2nd class Febrifuge contains
acids — Acids portion a very small
in chemistry affection very much in
hospital with me and still more so
medicine there being no effect in the
solids in water — Some of those of
require a very great quantity of water to
dissolve them & may be drawn into
the stomach in much greater quantity so
as to get into the blood & produce
disorders such as those of the sedatives
as sedatives they have very little
same effects — Lect. It has been found
to be a powerful medicine

1 of Chorea g. i. has partly been called
hitherto

b. th. vehicle acid is generally
in such cases deliquescent
and corrosive

vital more than the blood, except their
[illegible] is thought to employ a vinegar
acid of borax (or as it has been called
sedative salt. Hombergii) has been used
with in mania but without
appar.t good effect. Acids have been
employed internally as they are
an at least agreeable to acidulate the bev.
in ingest.t but they have not such an
effect in acute inflam.ns as to be at all
depended upon for lowering the
pulse. Acids have indeed been
[illegible] the employed for a length of time — but
for a certain length of time — but
this is a species of inflam.t acids are more
powerful — Indeed in general all
the acids internally are powerful
perhaps of dep.t of nothing in their sedative
power is accompanied with a considerable
degree of irritation. Acids in
these cases act as specifics as they are
indep.t they have a tendency to produce
a febrile slower & to lay off inflam.t
but their action is not always
powerful & consequently indep.t
their use & [illegible] may be acid
[illegible] — and French wine contains some
[illegible] respected, as oranges &c. being palatable
& agreeable to the stomach & also
[illegible] purpose admirably in [illegible]
they are useful in lessening the [illegible]
[illegible] is any inflam.t state & also
[illegible] and from their tendency to decrease the
energy of the pulse. Some have
[illegible] them in mod.t [illegible] to correct
[illegible]

It has been already observed, that for this purpose they are frequently used in the prison and hospital, exceptionably. and, none of them have any power of destroying or diminishing the infection, to prevent its spreading in the air. all they do, is to afford a temporary relief, for a period of a putrescent, chyle, in some cases, where nitrous acid has been used as a secretory, it has been found more readily than if a putrescent had been present.

The action of pieces of iron, in the stomach, for after 5 or 6 hours, their effects are totally over, so, if metallic oil remains in the bowels.

of intercourse of the sexes — There are
cases in wh. acids may be given
internally as sedatives — Tartar, &
other acids wh. are solid, & req. a large
quantity of water to dissolve them, may
be employd as purgatives, & vomits &
diuretics & diaphoretics — Extern. acids are
given as sedatives & are greatly applied in
inflm. of the parts, as of the eye lids, &
skin about the genitals — & in inflm. of
deep, as in fractures & wounds & ulcers
Give we them a little more cautiously
than usual they tend to inflame the
skin, as well as to act as sed. on the
bowels and by both these actions a bad
in cases of inflm.

Lect — The prep. of lead are powder of
sed. — by strength the most so of alum
we have — but we cannot rely on its
effect in urgent cases, & especially in cases
Med. given out in the shape of mixtures
either while they are applied to the sto
or when absorbed into the blood
after they have made their action great
diminish. & at certain critical cases — so
continue it a long time — There is a short
and 4 b) The action of Pens. & Alum
is entirely on the stom. but when
it is used out of the stom. & intests.
effects a longer time than three or
four days. They need, as 4 or 5 days
with, be continued by defer. weather & when
The effects of mercury are of a different
kind, one when it is got into the b.
vessels — and when it is thrown out of

[illegible] with [illegible] for some days
gently [illegible] — But [illegible] of lead, [illegible]
action [illegible] are the [illegible] effects
are not have their effects equal
[illegible] so that they are [illegible]
may [illegible] even in [illegible] effects, [illegible]
[illegible] which [illegible] lead [illegible] in the body [illegible]
~~[illegible]~~
[illegible] by no means always that they
not perhaps in 4 or 5 times — but even
[illegible] is [illegible] to relapses & [illegible] their
[illegible] in cases of [illegible] — for [illegible]
affect. of [illegible] intestines — of the [illegible], & in
[illegible] dropsical [illegible] (in the thora
[illegible]) ~~difficult~~ difficulty of breathing, & costiv
have in [illegible] [illegible] proved fatal
at length. — Lead therefore is a [illegible]
[illegible] by [illegible] [illegible] — [illegible] internal
[illegible] [illegible] for those [illegible]
[illegible] a very valuable [illegible] [illegible]
[illegible] only employ it [illegible] in cases
[illegible] when ~~[illegible]~~ [illegible] of the
[illegible] by the use of acids — for in
such cases, ~~[illegible]~~ [illegible] [illegible] [illegible]
[illegible] the [illegible] — The [illegible]
lead are [illegible] [illegible] in the [illegible]
[illegible] of [illegible] acid or its [illegible]
[illegible] acid (sacch. saturni) — ~~[illegible]~~
[illegible] is decomposed as soon as it [illegible]
[illegible] or stomach, of lead uniting [illegible]
[illegible] acid & is [illegible] [illegible]
[illegible] fluids — The sacc. saturni may
be given in doses of a grain or
[illegible] [illegible] [illegible] saturni
about half a grain — Sacc. saturni

of Gaubius & many other Practitioners of eminence have undertaken such cases - and it had proved effectual there — In Gil. where the Fever is speedy death, & there is danger from stance it is a shocking Idea of Divinity & the Judge of the Judge & it seems to need be very fit in such cases ——

contd in the crystals, a very large proportion
of water. When we compare it in this
case with the calx we call Cerussa if there
any dep. of sentiment — We will gearcely
give it credit in any case but hereafter
. Externally, the pacft. of lead, are mu
useful solutions — We use it by reason
of Sacch. & Murria Saturnie, and al
a compd. of Litharge & act. acid wh
is called Rt. Saturnie Acid. Diffrg.
porch. saturnie compd. of Salth. Satur
in a compd. of Litharge & act. acid. The
Rt. saturnie is of most powerful use
both of the Humans & — We use the
of calx of lead formed by exposing it to
vapor of act. acid, with all its associations
Lead is also calcined by heat alone
melted & exposed to the air, effects it blac
upon by the fumes — When heated red hot
& calcined, it forms a calx called Litharge
This calx combined in a redder calx
is called Litharge of gold — combined of a
yellow color, & called Litharge of silver
This is the effect of more decided
heat. This calx heated red hot, & exposed
to the air soon it changes its color
& becomes of a bright red — & is then call
minium — Lead has also to combine
with muriatic acid. This is done
by mixing minium & salt amongst
the same quantity, & distilling off the mur
alkali wh. is detached — The remain
ing in the still is muriat. acid combined
with lead — Either the salth. of lead

dissolved in water or cerate, may be
dropped on the corroded, advanced tissue
in the shape of Calcia indeed, it keeps
frequently in motion not attended with
pain but itching — Both cerate &
of salts of lead dissolved in water have
a coincident in the shape of eyes, &
cancer, may be attended with little pain
when they have not lived habitual
a place we can venture to cure
free by Sedatives applied. — In cancer
& other painful ulcers, where we have
little hopes of a cure, but only mitigate
the pain, prep.s of lead may
also be tried ~~[illegible]~~ of
advantage both cerate & of salts of lead
dissolved in water — — There
are some med.s we are employing
~~with [illegible] & others~~ in this Coll.e
Externally, as being med.s generally
as sedatives — as alcohol &c. where
persons we shall take notice of
we consider their gen.l action on
the system —

of one species of animals that is
fed, as cap. the called fibres & make
them trade out the water so as to
contract them have been already considd.
the species of animals we are now
concerned of and there is no increase
the time of the nourishing feed.

Lect. 37th

Of Astringents.

All of most parts of the body are constantly contracted more than they would be if they were perfectly even while they are at rest — this contraction is called the tone of a part — and we increase it by astringents — Most of those substs. we have found this effect if they be applied to a ~~living~~ dead fibre will make it contract, therefore it was supposed if they acted on simple solids — that they did not exert a tone but made the solids contract just as they would do if they were applied to them in the dead body — (a) But the contr. we is produced by applic. of astring. to a dead fibre is quite different to the prod. by applic. of astrin. to a living body — for the contr. occasd in the former, is by precipitat. so that this action on a living part serves, while the latter is by a power depending on life — we i. e. altering the matter of the fibre — altho' the effect contr. in both cases, yet the contr. is quite a diff. operat. in one case from what it is in the other — Astringents are not necessarily applied to the fibres, their astringency is exerted — If there be a hæmorrhage from the uterus alum thrown into the stomach will stop it a dispute it in less than a quarter of an hour long before we can dispute it be reach the uterus — Even sulphat. of alum was to be taken in

(a) Ten grains of alum for instance if solved & diffused thro the whole of the fluids wd impregnate them so little that they wd not be able to exert any astringency. For suppose there be 30 pounds of fluid only, it wd be only one grain to Ꝑ iij — Now if we dissolve a grain of alum in Ꝑ iij of water it will not render it in the smallest degree astringent to the taste —

cause into the blood - resp. the quan.
of it wd. be too small, to have any
effect diffusd thro such a mass of fluids
(4) Ingd. cound. athing. as acting on
the bld. resp. we must cound. that
they are alwy. full & this bein the
case, it is impossible f. all y. resp.
shd. cont. at once if they did not
throw out y. fluids - indeed y. purpose
y. takes plc. sometimes answers
prone measures — — Athing. are
not cons. diuretic & diaphoretic resp.
because they make y. whole bld.
resp. press more strongly on y. blood
& throw it out wth. greater force - but
as they make y. exhalants & y. secretory
of y. glands contract they by this
means tend to stop the sec. instead
of increasing it - wh is their ordinary
effect - Athing. do not act equally
on they act more on the small than
y. large resp. & therefr. they are apt to
make a forcing discharge of y. blood in the large resp. - Athing.
do not prod. a permanent effect on the
system their action being only cont.
a short time — After an athing. is
issued out of the office, the
cont. does not exert y. effects of the liniment
is exhausted in the first 10 y. minutes
& yet leave much greater facility in
the parts after their operation, so are
when we apply a athing. to
a simple solid out of the body, & make
contact, it bleed. more, or
y. effect of a compressive & astringent

a) The art. of Trim is given in a separate article entitled Rules relating to the Trim —

[illegible] called [illegible]
[illegible] of [illegible] and [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] of large [illegible] [illegible] [illegible]
[illegible] small [illegible] — Nothing [illegible] the large
[illegible] full, & [illegible] [illegible] it [illegible] [illegible]
for [illegible] [illegible] too much [illegible]
[illegible] of blood, [illegible] as they [illegible]
[illegible] [illegible] of the strength [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
instead of strengthening for them — their
[illegible] is over, the [illegible] are left
[illegible] & [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] & that [illegible] strengthen & [illegible]
[illegible] as [illegible] — but in this case
falls — [illegible] — [illegible] such [illegible]
[illegible] [illegible] much better than
[illegible] [illegible] — [illegible] — [illegible]
[illegible] because their [illegible] is [illegible]
[illegible] — this very rarely [illegible] of an
simple [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
do not [illegible] for their [illegible] but the
qualities — [illegible] like their [illegible] differ
in this, of course of them all [illegible]
[illegible] universally [illegible] — [illegible]
[illegible] (a) — Some [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
do not [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] — Now in general [illegible] [illegible]
[illegible] their good [illegible] [illegible] [illegible]
[illegible] the abdomen — [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]

[illegible] Where shd. be a Class of bld. on
[illegible] & a [illegible] shd. take place
in consequence of such an attempt
[illegible] the principal Cause of
the inhabts. will often be brought
on [illegible] a much more fatal
issue

not seen when I first [illegible] many [illegible]
a quantity of infus. galls, that are
in the Urine, it would probable that
many things are repelled by the
Cutis & do not get into the bl.
vess. — It would be desired if
some Gentlemen only should offer
an opinion, whilst there are
persons who act in a fid. principles, of
they are transmitted into the stomach.

Strong Glauber's salts applied to a
one sided [illegible] gland
in substance by a strong Glass are
of no place to cured of cause of the
secretion. Bitter & strong smelling
herbs applied to a glandular of sec.
Man of sec. or other matters of
for if we put a stop to of sec. for matter
will not be wanted of strengthening
[illegible] of the parts — for if there
be a glass filled on any part of
body, or some sec. takes place as
further influx is prevented but if
we put a stop to of sec. by a cut
a strong, then influx of of part will
in many instances be prevented
should have a worse disease but we must
also be careful then to remove
any strong matter or glass of be
from a part before we can stop a
sec. be on strong, with any advantage
Prof. Q. Pl. — I, be observed you only
have only a temporary effect for as
soon as we can leave off the
use these strong relucting —
Strong only stop of sec. for
[illegible]

of matter secd. in red corpuscles but
stimulates of gl. so as to keep up the
secn. — Thus in cholera quickly
thin watery fluids are secd. causing of
mechl. rett of the blood, with stim.
of intestines & keep up of purging
& vomiting — Rue put a stop to the
secn. from these fluids, are and longer
applied to the surface of intestines
when we have the use of
gating of secretn. does not return
in of a considd. def. of gl. has
prodd. already the secd. matter tends
to keep it up when it wd. otherwise
subside — In this case it is well
of this secn. still be kept up by
means of gating till the gl. has
sometimes to subside as in a dysen.
where a considerable portion of lower
part of intestines has the gl. secretg
a mixture of internal coat & apparently
gangrenous — In this case it may
be kept the secretn. stopped for many
days sometimes in order to allow of intestines
to return to their former state &
by this means we prevent of return
of the purging — or a secn. may have
been substituted — and if put a stop to
by astring. for a time, we destroy the
patient ~~& subject~~ on leaving off of astring.
secn. does not return — In of. wd.
from gl. may have ceased of gl.
temporarily — and by putting stop
this case, we prevent the secn.
gd. — Unless an astring. have a
other of these effects if it be fin.
counter of a gl. or a secretion other

In these cases we might conclude
that a fracture originally but if we
consider if they touch only the
surface of the gums for want of
laxity, it ~~[illegible]~~ thro' out of it will
appear evident if here they actually
on the bowing bones

[illegible] whenever [illegible] returns —

[illegible] have also been [illegible] in consequence [illegible] in this case [illegible] inference [illegible] taken [illegible] which [illegible] the force [illegible] whole [illegible] in [illegible] ~~[illegible]~~ [illegible] will [illegible] in [illegible] which is [illegible]

[illegible] muscles [illegible] stretched [illegible] which [illegible]

[illegible]

[illegible] where [illegible] [illegible]
[illegible] they are [illegible] [illegible]
Mr. [illegible] applied [illegible] act as [illegible]

Lect. 38.

Astringents cont.

Mr. Jones a class of medicines
not of very great moment — for they
are [illegible] enough — Those
of the vegetable kingdom in Mr. Fullers
Catal. are anfractuous earths
in immense quan. in Jamaica
for a third part fit nearly as
as Terra Lemnia — Bigg rated
to pure — but generally inequable
Spar or calc. earth [illegible]
[illegible] of calces [illegible]
[illegible] — as bol. Armen. & bol. Gallic.
[illegible] once very [illegible]
& it was [illegible] of argill. earth
& bole ~~[illegible]~~ cannot [illegible] cannot
read diff. [illegible] & to ascertain
their [illegible] the public [illegible] of
Corporations [illegible]
& hence they have [illegible]
[illegible] they are [illegible] still
used in dysenteries & others of [illegible]
have a slight [illegible] astringency (a) — Those
of the calces [illegible]
[illegible] are still [illegible]
[illegible] — Calcar. earth [illegible]
already said may be [illegible] to [illegible]
acidity in the [illegible] — [illegible]
also a slight [illegible] astringency [illegible]
[illegible] of [illegible] to [illegible]

these near them. Some of the intermediate are compd. and of other, some
of lime will produce the same phenomena
on the calcareous earth. In this case calcareous earth has been mistaken for
a sudorific — It has been used in
dysentery & these yeast as a very
slight astring. & do they any sudorific
activity — The earth procured from the
burning of bones has been found in this
case, perhaps the phosph. of
earth also is from soil formed
of the calc. earth & phosphoric acid
is found in animals — Calc. earth
is generally found in combination
with the acid of carb. & the acid of the
calcing of bones is from the burning
& transmutation of animal matter
in bones — & is called animal
earth — This is an instance of
the compound of a fixed earth & phosphoric
acid is called Calcing — Alum —
is found in small quan. native in the
bowels of the earth — but it, generally
by stirring slates, it is clear a little
hardened, contains some pyrites, iron
& either & phosphoric acid & a fixed air
or ~~[illegible]~~ in the small
matter & being in the bowels of the
by w. ~~the~~ the argillaceous earth
acid & the fixed air & argillaceous earth
formed alum — There is very few
a quan. of superabd. water in the
acid which may be taken out by
heating & the other, after this, it
water is seen clear — in by addi

a small quantity of chalk or any other
calcareous earth, so as to saturate the acid.
The calcareous matter of the acid so
combined (Paris plaster) is insoluble
but a very small proportion dissolves
in water — so that the acid adheres to
the calcareous earth & falls to the bottom
We may then employ half a pound of alum
so as to make it pure. When alum
is applied as an astringent, it is
better to have it free from any excess
of acid. It is of no
consequence. Alum is a most
powerful astringent — of quicker action
& more universal efficacy in
relaxity of the gums, or tonsils, than
has been supposed & some of the
other astringents are very better
when there has been a long mucous
expectoration, especially in the
cases of pulmonary consumption — Gallic acid
& oak bark — Gum Kino albus & Gum arabic are
most useful in this kind of cases — Alum has been used
in these cases it is not the best
astringent we can apply to the stomach
in gonorrhœa or fluor albus. It has been
used in the form of injection in the
advanced state — In the latter where it is
proper to employ astringents it is the
most powerful & one of the most
efficacious of the vegetable astringents
a short time — In Gonorrhœa where
[illegible]

long time, we nothing have and
paper but where of good is more
water alum is paper. It is
appl. as a sedative in inflm. of the
eye-lids & of the tonsils & throat
part & prod. good effect. Alum
dissolved in cold water and
coagl. milk in order to take off
its taste & has been also used
pills. It is very difficult to make
into pills, or rather by swelling
dragons blood. It but the solute
of it in water is not disagreeable to
taste, & acts as readily as if it be
swallow. in any other way. It
is not worth while to give it any
other way. If one wants to apply
it externally, he may take of white
Lime & add it to it in Gréce & alum
the alum coag. of white of egg
a quantity is suspended in it & it
it may be applied & retained on a
wound a round time. Some instead
using alum, states & other mineral
salts have been substituted as
Hibernicus. but it is far better
to give pure alum, because we
can ascertain its dose more
perfectly.

In Dr. Cleiny's catalogue, there, you
some recent prepns. chemically pure
the indications are but very few
employed as astringents. 1st. Alum. The
impurity of it, blue vitriol is so
as an antidote to such poi

* Office has connect. &c. complet. in fine
folio - bind. & gen. paper the
origl. in Part form with Ref.
a ted plan

of loose humours flesh — Therefore it is considerable deriving of infection of the body — Opium in the [illegible] form is the most readily soluble of all manner of forms of the metals, but is very much in its action. A precipitate ought to be used for the purpose of [illegible] more certain in their effects — The salices of Jesuits powder [illegible] either by heat or by moisture & chemist to their reactive being not only soluble in the salts of the stomach — but also in water & liquor with the good purpose — but have yet to be adopted — It has to be supposed in the use of opium [illegible] the salices have to be found in corrosive [illegible] of the [illegible] by fresh food being drunk in the [illegible] ship has caused the salices to be held in of water & yet such real effects as have taken place on such occasions as sickness & vomiting with a dep. as sometimes to prove fatal. There is no [illegible] poison in opium — yet it has to only [illegible] too large a quantity has to be taken to astonish the stomach & intestines & prove fatal just as if a large quantity of jalap &c. had to be exhibited. Indeed it is wonderful to see one [illegible] of good & bad tastes [illegible] & taste are [illegible]

2. Whenever we find Compounds, in which we are alternate in Force

3. How other solve of salt in water or distill of mineral acid & crystall? It is called distilled mineral

guards against a very small quan-
of the calx of copper but when it
gives a very strong dark
initial copper & blistered acid
procure from the Druggists
large manufacts. in the form
lodi polvos of pieces of copper or
gilt buttons in order to supply
the Gold — Whichever way it is gon
it forms Crystals 30 times
green and 1st Blue initial
2nd red instantly as well as entirely
fumous flesh — Copper has been in
use combined with acetous acid the
combination is effected by the help of the
nitric acid — This is done
in countries where wine is made
by taking the proper after the juice
has been squeezed out of them & placing
plates of copper among them
fermentation & become acid & the sugar
of the copper combined with acid
with the formed hence a salt
called verdigris — Verdigris
was formerly prepared & is
used in all cases when we
now use red precipitate — Copper
has also been combined with the
ammonia — The liquor of plates of
copper moistened with a solution of sal
ammonia — they combine together & form
a blue salt — which has some time
advantage in philosophical experiments
when we wish to detect the minute
solution of copper in water also

Lecture 39th Astringents cont.

Iron was the med. of most eminent principle as a strengthening remedy before Cinchona was made use of & which there are a great deal of preps. of it — In its metallic form it dissolves in the acids of the stomach & is therefore an inactive med. & very certain — It dissolves more or less readily according to the size of its particles & frequently if administered alone does not. It is reduced into a powder by filing. Two grains of it in very fine powder have as great an effect as 10 if coarse — It is sometimes reduced to a very fine powder by taking lime, calx of iron, viz. by dissolving iron in nitric acid & precipitating it by fixed alkali. Sometime this calx — we put it in some glass, & put it into a crucible & state another over it the mass it just red hot about an hour & then let it stand — Take it out & letting it stand till it is perfectly cool'd, we find a black powder, for shell of charcoal & the flux, then he washed it by water — This black powder is iron in its metallic form called ethiops Martialis — Iron has been used called the common rust of iron, is readily sold in Boston. Steel has been made use of for iron called the great — The scales of fall of iron

are its best heated, are also readily
soluble, & a sol.n of these in water
of water & spirits has been employed
the called Spiritus aluminis, & the
healers or slaves — These are of similar
nature & it is hence and as attributing
they have been and as giving their
practitioners to recommend the use of
also intering in cases of pressing & other
Lapis hæmatites (calx of iron) &c. in
of bowels of earth, crystallized in
striated crystals, has hardly ever
any effect — Iron is nitric acid
forms green nitrat — When green
nit. has been dissolved in
in the acid & not the jugular it
called sal Martis — The dif.ce is the
of in Mars are there little super
acid in it but this may easily
be prevented by dissolving green nit.
in water, & adding a little nitric
acid, & recrystallizing it — The calx of
of comp.d of iron & nitrat. ab.
has been made use of — called mercu
Jovis — This is very apt to decom
during exposed to the air — This
prevented by dissolving it in water
adding a little alcohol — and hence
Mercury has been called Tincture
in spiritu solis — Iron has also been
compd. combd. with tartar & the
forms a salt — These are dissolved
filings of iron with wine. The tartar

(a) Gold is dissolved in aqua regia & precipitated by sweet spirit nitre all the gold will be dissolved by the other & add an known proportion

(b) The Regiment of Lead Prince Ru[illegible] Rupert & Princess Sophia of

of the mine dissolves of iron — if
we take any calx of iron & sublime
it with sal ammoniac a considr. part
of the impurities with it of sal ammoniac
& sublimes with it — This preparn is
called flores martiales. It is soluble in
alcohol & its solution is named tinct.
flor. Mart. — It is difficult to exhibit flo.
Mart. in any other form — The
acrid & deliquescent qualities
dissolve them in water, they are
very apt to decompose & what remains
at the bottom after sublimn. is a
solution of iron in sal ammoniac
If this be exposed to the air it attracts
water enough to dissolve it. This is
called liquorium martis. It is the
best preparn. of iron we can employ.
It was made a desideratum to unite
iron with an alkali & it was supposed
in some cases, it wd. be of
considr. efficacy — (2) Iron has some
been exhibited combd. with sulphur
by melting them together but
in this way the iron produces no
effect — These are the preparns of
iron which have been made use
of in medicine —

Sea H. has tried it as an astrin
in injections in gonorrhoea being the
fluor albus & in gleet & in
this & good & very well [illegible]

as well as a sedative, but it cannot be employ'd on acc.t of its [illegible] effects

Zinc as an astringent is the next among the minerals — Calx of zinc call'd Lapis calaminaris is found in the bowels of the earth in a variety of forms sometimes in that of a white powder — at others in the form of a hard solid stone. That which is commonly employ'd is a kind somewhat brittle. [illegible] it [illegible] into as small pieces as possible which after that sh.d be heated red hot & then cooled suddenly by throwing it into water — it sh.d then be reduced to a very fine powder. After being pounded in a mortar it sh.d be ground on a slab of porphyry or agate & afterwards thrown into water & stirred, wh. it — after the water has stood about half a minute, it be poured off — Thus we get it in a very fine powder — We employ it as an astringent in ulcers to induce the growth of new skin for wh. it is very powerful — Another calx of zinc is found in the chimnies of the furnaces, in wh. brass is made this has been called tutty — it was much more frequently employ'd than it is today. It is somewhat more soluble than lapis calam. has rarely been used as an astringent. Another calx is produced from zinc, b

It is easily known - but the
remains of the color

melting it & heating it to a little red
Gran & red heat — then exposing the
surface to the air, when it calcines
very readily to an opaque glass
& of colour a very fine white powder
Antimony thus is an useful Ingred.

White Vitriol is a compound of sulphuric
acid & zinc — this got from dissolving
the metal in a little green or blue vitriol
& filtrating the liquor when cool
it shot into red. Glittering crystals to redissolve
in water, & very altering it — Zinc
may be calcined into flowers &
is Sublimed the best process of all
Zinc has only been employed
either as an astring. or in lieu of
one designing for stability —

There's an astring. juice in a
g. no. of species of Apples to be found
& is soluble both in water & alcohol
& has the same taste this produced by the
ferm. — this coagd. by heat & through
when we make use of it as an
astring. ferm. product. we find it prove it
a little upon heat but digest in cheap
gas dep. of heat — this also coagd. by
metallic salts as gold. sev. other
ferm. juices a.c. &c. are not figured
astring. — Hycolon is shaving when
coagd. in gen. — 101 this class of
any salt Brian, & lead. of a
such a Jaundice as be seen below
the 1st class of Plants containing

tips juice are called by Linnæus
Fenticosa — In all of them the stamens
grow out of the calyx & the petals
then have about 20 stamens or more
altho' some, such as tormentilla have
but 4. More curious, in the calaceæ
are agrimonia - alchemilla - aquilegia
comarum palustre - fragaria - quinquefolium
rosa - tormentilla — Why these
have been called opts as a thing in fomenta
to trace the parts & subject to act as
sedatives in empirics - the mucilage of
flowered leaves & red roses have been
used as a thing in cases of inflammation
& also in pain to act as bedal in
inflam. of the eyes — The root of tormentil
has been given as an astring. in fluxes
in old age, it is a very gentle astring.
the most clash of astring. in the
Stellate of Linnæus — of which are geum
galium - asperula - rubia tinctorum
The stem of these plants appears as if
in one joint, at each of the joints
many leaves grow round it
the form of a star — This
astonishing prop. in these vertices have
been given to recd. of various diseases
by those who have written on
the Mat. Med. — We find accounts
universally disappointed & we believe
in any of them — Perhaps only
have been guided to this class of plants
was supposed to be a specific for cancer
Practit. who have not read much
have fallen in same old track
of Mat. Med. in the Pharmacopœia

imported to England wh they had very
thought of — then immediately they have
found a pleasure — a nostrum of singular
note — Hence we find yet obtain
to med. admittance into Parliament
at time but they are soon rejected
of — their beneficial have no effect
all — at least of a good one. It appears
is a slight astringent — but not of the
use in cancerous cases — yet it time
is something drying — & but seldom
med. tho' some have an astringent
purging — Phys. has recommended in case
of obstinate of gleetes — but it does
not appear to be of any efficacy — for
— never saw any effect from it —

The Vaginales form a distinct mal.
class of Plants — They are remarkable
for their remaining fixed stem
in the form of sheaths — of these are
acetosa hydrolapathum oxylapathum
acetosa — hydrolapathum — oxylapathum
historta — rhaunia — we prohibit use Bo-
of historta — The root of it has been used
an astringent vomit. in cases of gleet
The astringency of rhubarb is greater
in comparison of rhaunia it more happe
to be used among the purgatives

Lect. 40th Astringents cont.

The next class of astringents consists
of Acids — They are denominated fixed
Acida — Acidum commune — Acidum
The astringency of the fixed acids
consists — They have sacchariferous

(2) that in the north gate —

in deficiency on the lungs where there
for generally with inflam. of the ... com
adhesage — The Gilt Nuchal called by
Linnaeus holosericeum Gelsipres, has
been used to destroy the tenia or tape-worm
we are to pick off the grounder if it
early in the morning. The Cattle
certainly a slight suffocation was in a
water-gruel or something of that kind
Three hours after its exhibition, pur
strong purgative, as a mixture of
Jalap & Scammony is to be given
By this period, if worms have been
in instances of surely brought out

The Mopes have also a thing similar
They have a singular gesture of
have and be cow in it. There are
a singular set of plants for while
we find Sheep flourish in a green
& summer & delight at it was in
heat, they seem to be as good of
flavour in the latter part of autumn
& middle of winter. Some of them
hardly grass, especially of ground is covered
with snow. They contain a number
of different juices as we see from the quantity
they have to be made from them
they have not been analyzed in made
the colour ground liverwort, Cicuta
second, the lite of a mad dog
but Dr. Coleman, of Mass. says
The right class in other, grounds
are, ancient — regular — gentlemen — or
These have not been cited as antiqu
in antiqu. — only scraps of them have

a Person suffd. epilepsy was a Dis-
ease wh. ye. Ancts. mistook inspira-
tion of the Gods — Whosoever a Priest
pretended ~~a oracle but~~ to deliver
an oracle, he yt. appeared to fall
down in an epileptic fit was of
the Gods (but certainly they were
Whimsical gentry) those gathered
to inquire a response when in
convulsions from when in
his sober senses —

Darkness may suppose by the
Ancients to be a Holy phrase & a plant
Incense of same it Holy Coliness must
consecrate a Holy Discard ~~of those~~
violate mortal epilepsy! —

in, and to smelling of mud. — There is an infinite no. almost of simples, some of which we have described of, are among in the catalogue — as anchusa, which has varied the antiq. in capacity of gum balaustia, of flowers of pomegranate — bruella — hypericum — lythrum — millefolium — myrtus — plantago — polygonatum — vaccinia — sedum — rubeus gummus (or mistletoe) — The last has been particularly used in epilepsy — (a) Mistletoe grows, seen, rarely on ash but from trees — Wood sorrel throws its root into the ground but takes it ~~[illegible]~~ somewhat from other trees — By this means it thickens the branches many, much and make woods much darker than flowers they would be — (b) It is almost incredible what shines of virtues have been have been by the learned — Uthica or of common nettle is now hardly ever employed — Urea urine has been suppos. of leaves of it to dissolve of stone in the bladder & urinary passages — A stone in of urine of the human urin. stimulat. of inflamm. of interior surface of the kidneys or bladder — and then a flow of this secreted. Stimulates washes of of mucus, perhaps the part inflamm. Things tend to stop of see of course of resemble is cow, in the animal mucid fluid which depends it — so far an thing is useful — but we do not in particular so — for to see

is here no power of disposing a clou
Acacia is hardly ever used
Terra Japonica, & sanguis Draconis
are resins & substs. obt. from
trees. They are the same substance
only when of a darker color, it has been
called Japan earth — when of a bright red
Dragon's blood — The resins of the
3 last kinds of trees are all combined
The Drug indeed they are usually
come here a red well mixed
lump, as Dragon's blood — They are
powerful astringents & deserve a place
class of medicines — They have
the very advantage in such powders
as have some or clearly as in too
of a tablet of the succinea & other
similar cases — They are also
used in powder of have been
to a considerable length, upon a hint
are surprised at the success — They
be used to stop bleeding vessels — but
they have been applied in the form
of plasters to restore the tone of
muscular fibres — Pomegranate
bark, that is, the rind of the fruit of
pomegranate is generally good
astringent & has been used chiefly in
dysenteric cases & perhaps rather
it have been used to a great length
in gonorrhoea & in fluor albus
It has rather a strong astringency &
therefore is useful in diarrhoea
and from weakness from

The best are gen.y f.d in Syria

The half an ounce is equal to
two f.d decan.ts - each cup is a
dose

Cortex Fraxini is hardly mentioned
in the — Phar. Comm. Lon. & Edin. as
a remedy of intermittents yet
Dr. Cooley queries is a very powerful
astringent — The bark contains
astringency in greater quantity & galls
are formed in the bark contain it
in still greater quantity — Galls are
formed by an insect wounding
the tree — for instance there arise from
a quantity of fluid in which lays its
egg — This fluid concretes round the
egg & forms a roundish ball — and
when it is hatched the insect eats its
way first out of side so as to leave a hole
& cavity within — The leaves of the
W. are small — of a bluish color &
firm texture (a) They are with fo
Spreading sec. ribs are running due
to a considerable length & for putting
a stop to harm. leaf are young or
slowly expand in mealness — They
are often applied to bruises Grand
cold infusion — and to restore the tone
of muscles of its bark — They are amo
best astringents — Their astringency indeed
is perfectly similar to that of great
no. of plants that are employed — but only
more powerful —

(a) Cortex semi-double & lignum
Sandpecheme have an astringency some
what different to the plants before mentioned
very slightly aromatic, W. has a disagreeable
smell & contains a very little fluid

If we take a little alum-water, or gum, & chew it it gives a sense of astriction all over the mouth but if we use it in the same manner, it only makes the mouth dry, without the such sensation as astriction — & there have been frequent instances of purging as astring.

But astringents we find are very numerous — but not a very powerful class of meds.

of the has been supposed that the contractile
diff. parts of the body, depend on
their elasticity when they were not
brought into action. If these effects only
make of minimum such contractile was
by dint of force of elasticity, and it
but it is clear if such contractile is not
owing to elasticity for all of most
parts of the body are constantly more
than their elasticity wd. contract them,
we see by this contractile being lost
after death — This loss of life does not
mend diminish elasticity, there must
some chem. change in the fibres before
their elasticity can be altered but
loss of life wth such chem. change
must be by contraction —

Lect. 41st Of Relaxants.

Relaxants are a class of remedies which [illegible] not been [illegible] by any author that I [illegible] who has written professedly on the Mat. Med. — Hoffman & some other practical Writers in many places take [illegible] of relaxants — but the remedies we have arranged under this class have been considered as producing other effects — Dr. [illegible] has not formed this class in his [illegible] of the Mat. Med. having treated them under the head of evacuant medicines. — Now it is clear neither of [illegible] by no means any relaxing effect but on the other hand produce contraction

(a) rigidness & dryness all over the body. It is very true that the action of [illegible] produces universal relaxation but it is [illegible] for it is still after it is carried off by the [illegible] [illegible] other [illegible] — They are certainly therefore with impropriety considered as having produced stiffness — [illegible] since these remedies have not been considered by writers of the Mat. Med. it is still [illegible] we shall be more [illegible] We may take it on this ground [illegible] may be [illegible] by a great flow of blood from part of the body and heat. [illegible] may be [illegible] by a [illegible] of the [illegible] or by [illegible] of the fluids in [illegible]

happens or by relaxing the secret[illegible] of
the glands relaxing them so that the
same force of the circulation sh.d throw
a greater quantity of fluids thro them
By stimg the vessels of the secy appar.s or by
~~[illegible]~~ throwing a larger quant.y of fluid into
the glds – or by relaxing the secy vessels, an
increase of the secn may take place.
Some emetic tartar, it shall
happen sometimes in a quarter of an
hour, there shall be sensation
at the same time an incd secn
more moist on the tongue &
mouth from the intestines – and [illegible]
general [illegible] for all the glds. The
tartar does not stimulate so as to [illegible] the
[illegible] on the glds the pulse neither
becoming fuller nor stronger nor
any ways altered — there is not
~~time for~~ the emetic tartar to have been
absorbed – carried into the system
applied to the glds for it takes some
time – We see the ~~[illegible]~~ 24 hours
before mercury affects the glands of the
mouth — [illegible] if [illegible]
an [illegible] & if it were [illegible] in
water, & applied to the skin, it [illegible]
it contract instead of [illegible] – [illegible]
as applied ~~[illegible]~~ [illegible] as an [illegible]
[illegible] this effect on the [illegible]
[illegible] at least on the skin
[illegible] something instead of [illegible]
it does not [illegible] and the [illegible]

circul.— and all of which in of opin
& inter. parts of the fluids, fed in mean
in St. affected at one & of same time
it does not make any partic. flow of
bl. on any partic. part. — nor does it
stimul. to great. sec. by pulling to the
bl. vessels, the fewer to of bl. for it
wd. have the reverse effect if it ac
and therefore there is no Mech. mean
in St. of Good. Prince. sec. of
by occas. gen. relax. As action of
more powerfy. on the small than
large vess. as to relax. — Nerv. influ.
of all of vess. sh. be relax. at once
because they are alike — adapt
themselves, to their contents — Unlik
agency of quant. of bl. in the vessels
we can not ass. their size within
of whole together — Relax. has action
on all of them only tend to dis
they press on of bl. in the large
just as they act more readily on
the small than large vess. they occa
a larger quant. of bl. to be transmitted
into of small vess. & so to diminish
do of in the large ones but as it
vess. a great power to contr. large
vess. to adapt them to of bl. they con
relax. and to unclosen the system
occas. of action of the limits force
to be chiefly exerted on the large
Mod. of rad. relax. are proper of
their effects. & query extensively in
accord. have to universally con

for many practitioners could not
not belong to particular classes but of
powers of each, separately — the action
of medicines is not so well ascer-
tained, & we can seldom with
certainty reduce them to particular
classes — There are many medi-
cines which some practitioners have
considered as stimulants & others
as sedatives, & therefore of consequence
many general ones, which come under
this class, have frequently been ranked
other, —

The first we shall mention are
mercurial salts which have been very much
employed in medicine — Vitriolated tartar has
been supposed to be so useful in a variety
of cases, that if we may believe what
has been written on the subject, we
might conclude it was capable
of curing almost every disease incident
to the human body — but under the
appellation of neutral mercurial, it is
a stimulant — under the name of sal
prunel, a sedative &c — Most
of mercurial salts act as purgatives
have a strong disposition to excite nausea
& pass rather into the circulation
than the primæ viæ — which
salt soluble tartar — polychrest & the
on the contrary vitriolated tartar which
now much in use in London
under the name of salt polychrestum & vitri-
olated salts of Seignette, & sal am-
are made use to act on the bowels
We may add the mercurial salts

[illegible] which it has been stated, prod.
[illegible] the defendant of strength for the
time of [illegible] said, a man
who took [illegible] was in danger
of being killed [illegible] of ~~[illegible]~~ plaintiff
provoking, yet [illegible] was not confined

1. Mr. F. had examined in this class
quite a ~~[illegible]~~ number — but he is doubtful
as to their effect & her Counsel objected
them —

to make them act more on the
stomach or more on the intestines
give dissolve neutral salts in a
large quantity of water or if one wish
to purge much a large quantity of such
immediately after having small doses
at bed time & early. Then Opium to
intercept the bile if we give them Opium
in a small quantity & make they act
on the stomach & in the latter case
they sometimes produce a tendency to sickness
but more generally sickness than vomiting
in general they are exhibited in small
doses tho' they have been given in various
forms for particular purposes sometimes
5 grains sometimes 1 or 2 grains
either as a purge — 20 or 30 gr. of the
has more frequently been given than
4 or 5 — rarely so much as 1 gr.
Mr some have recommended it in
large doses — Digitalis salt of Sylvius
has been given in doses of 1 gr — sal
ammoniac 1 gr — As lemon juice or
Minder. spt vinegar are given
right as to strength & quantity & so also
rhubarb or spt. Mindr. has been
begun in proportion to strength of
either of these — but it should not
more than 1 gr of dry salt per
in 1 — more generally 1 gr —

(2. They gave it to the sick in drams
2. heated. They used it cold to the frozen
limbs. for they gave it in high proof
3. & 4. to those in a lethargic & phrenetic
state, vomiting - so that the Dis.
might easily be

Lect. 42. Relaxants cont.

Of the Prep. of Antimony &c. —

Tartar emetic was excl. by Dr. Dickson, in fevers hitherto, but Dr. Thos. has little given by the Moderns — for as the antimonial idea has worn off, nothing seems given to it, in a little time it was not worn out, we cannot say from our own experience what effect it will be — Solids & Liquids, Medicines & Materia have not in general answered —

Ipecacuanha is the root of a plant of Jamaica in the warmest part of America — It was first employed as an emetic — as it has a specific stimul. to the stomach — it is more certain of good from it than any other emetic — Dr. Cullen, effects of the emetic powers — Pneumonia and the phlegm. lost as a stimul. in rheumatic cases & cutaneous eruptions — then in dysentery — & it is just lately that it has been given in gen. an effect of the Prod. gen. as a relax. — It is very [illegible] relax. — and where fibres are dry — of g. a. it is rather specific

(a) Dr. F. believes it altogether not less than 2 or 3000 diff. ~~kinds~~ chemical spec. of some be performed of quadruple of per antimony - but all of the nearly of same effect of producing a fever ——— ——

(b) This is a criterion of the goodness of as called by Mr. Griffith of such a antimony.

to the p.ts of antimony, especially as
fur. — but in fact, where there is
it is necessary to attend to it.

Antimonial preparations are very
powerful relat. to such as that
antimony rather than mercury
has, at the better of the sect of Galenists,
as the conc. of all med. Pr. to be
fur. ~~[illegible]~~ Pharm. — Antimony
has been the constant source of all
humours — its power in causing the
acute dis.s has been very considerable
& very brilliant as its great. evident
effects — this has led the care and skill of
the most learned heads of chem.
pharm.ts (a)

Antimony is found in the bowels
of the earth, like other metals, in
the metallic form — a regulus, but combined
with sulph.r forms a blue ore — and
also combined with arsenic forming
a red ore — the ores of Hungary
among things of a red colour, this
account will be rejected — the
ore is easily perf.d for the earthy
matter, with which it is mixed — and
from the ores of other metals by melting
it with Quicklime, which a red flux —
when in fusion it is run
into conical moulds, where in
cooling it forms long crystals.
The regulus is tumbled, after the
ore has more metal than
of a sulphure —

Antimony in its crude state, has seldom any effect as a medicine. The metal: half has been reduced by a great variety of different processes. It ought to have its virtues ascertained by melting antimony with twice its weight of fixed vegetable alkali, which unites with the sulphur & separates it. This also prepared by melting antimony with iron. The regulus of antimony is employed for several economical uses. Though it is very cheap. Thus we can procure a durable soap, very pure & cheaper than we can separate it. This soap reduced at the same time to a very fine powder, & mixed with sulphur, constitutes the compound of the alkali & sulphur, which is prepared by melting it with 4 or 5 times its weight of alkali dissolved in water, & adding an acid. The hepar sulphuris formed of fixed alkali & sulphur, dissolves a large portion of the regulus, & when the hepar sulphuris decomposed by adding an acid, the sulphur falls down & the regulus with it. This has been called sulphuret of antimony. The regulus is not combined with the sulphur but only mixed with it. It is capable of being acted on by the acid of the stone alum. It unites with iron, & has been employed, with success, as a diaphoretic.

in greater - then from all the decom-
ded it stands exposed to the air, before
sulph. is also good — & expose it
of air decompose it so of of sulphur
falls down grain by the regulus of
antimony — this has it called the mineral
mineral — Antimony has been exp.
calcined — mixed with 3 times its wei
of nitre then deflagrate by nitre decom
of sulphur & forms with it vitriol tartar
& it decomp. of regulus of antimony at
same time & calcines it — this reg.
is called calx antimonii — it has some
been given in wash, when it contain
a grains of vitriol tartar & a little
superfl. alkali — Reg. of antim.
has also been calcined by mixing it
with an equal weight of saltpetre shaken
& putting them together & exciting
& setting them — this mass is
found to be good & called a calcine
cancer on a remarkably virulent
or under a muffle & exposed gradually
to a heat which to be used by decoy
as long as any vapor will arise of
the mass — this has red to a fine
white powder — this is of calcined of
of Dr James's powder — it is form
of a mixture of this & tartar
emetic — Reg. of antimony has also
been calcined by deflaming it with nitre
& precipitating it — but these calces
have little use — Reg.
of antim. combined in the mod.
acid & forms a compound decom
by water & as the vitriol may unite

A Novel method of making cinnabar, taken
from one of Pump's in Philadelphia — Take
of crude metallic mercury, which is a compound
of mercury & sulphur, any quantity — shake
it in a mortar about an equal weight
of Potash, little too little than too
much) for 8, 10 or 12 hours in a glass
vessel — The exact minutes in the effect
depends upon the sulphur — Give little fire
shake while hot & let stand to cool
we shall procure a mass of cinnabar
in crystals, with grains of a yellow
hue & water more of the matter, we
shall procure upon the crystals
this cinnabar is prepared to be
act on the glass altogether
of an intense & opaque as a clear
gum cinnabar larger than the
No. of Catterlie powder even —

in the phrase — scarcely any the
nitrous acid — but is rather ad-
ding it — Pound the mercurial,
by mixing with it, a sufficient
subtilizer & perform a distillation
in Butter of antimony as usual
Butter of antimony [illegible]
after a few a caustic — fluid, inflam-
as it becomes, so readily on
applying water — Pound the
[illegible] forming in a moist
[illegible] time either [illegible]
antimony [illegible] fresh
acid in an alone or flat of antimony
or a compound of sulphur & antimony
[illegible] rocks [illegible] & lai &
[illegible] of them [illegible]
[illegible] nicely [illegible] the [illegible]
[illegible] a [illegible] call [illegible]
thing is just some little [illegible]
in the [illegible] of a [illegible]
[illegible] in the [illegible]
[illegible] [illegible] [illegible] the
[illegible] [illegible] [illegible] [illegible]
to — for there is [illegible] a [illegible]
course [illegible] [illegible] [illegible] little [illegible]
in the [illegible] — It is not [illegible]
to make [illegible] [illegible] [illegible]
[illegible] perfectly as [illegible] [illegible]
acid [illegible] — [illegible]
much [illegible] made [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

℞ Tartar. Emetici gr. xxix solve
bulliendo in Aq. Pond ℥ij. Solutioni
fere bullienti adde
Vini Albi Dulcis ℥iij M.
Sumat statim. xx v. Cochlea 4ta 3ta vel
6ta quaq; hora si nausea ita
superveneri.

smaller dose consider than when
in a sensible emetic tartar of wgs. &c.
Vinous metallic emetic tartar
Emetic tartar may also be pre-
by dissolving any of these preparat.
of the antim. in wine in
contain, tartar in it for tart.
dissolves the sep. part of form
chm. tartar — But as we are not
able to judge how much tartar
there is in a given quant. of
wine, we cannot so nicely determine
the dose of wine wch. have sev.
in sev. times — It is thought better to
dissolve the emet. tartar already form
in wine — wh. prevents its being decomp.
We cannot divide emet. tartar well
wd. dose if it is so small a quant.
wch. having it in solution — if
we dissol. it in water, it may odour
decomposes — Perhaps to have it in
a fluid form the best way is to
(x) dissolve 4 grains of emet. tartar in
½ a lb. boiling water, & add ½ oz. of
mountain wine or some other
wine, ~~[illegible]~~ one — This contains
nearly one grain in 100 drops —
Chap. of Antim. has been explod. cont.
the sulphur as it is degant of
ore — but since melt. antim.
antimony wh. is an equal weight of
nitre, we get a com. of sulphate
pres. of antimony — iron, metall.
the sulphur does not degand the
antimony, for best acted upon by

by the salts of the stomach — is
this also proves an active
med. — Give melt crude anti-
with about 4 times its weight of fixed
vegt. alk. & alk. mixture of fixed
& f. antim. & the heat will be
a quantity of the vegt. — This compd.
is soluble in water, & f. solution
called tinct antimonii — some f.
tinct. antim. acris — The calcd
of antim. may be made into f.
by fusion — This is also an active
shed. when thrown into the stom.

Lect. 43. Relaxants cont.

Those preps. of antim. usd
in usd. are — f. lb. & lb. depur. &
on, consist of f. reguline preps. —
These medicines general is f. usd
has lately been substituted — f. class of
antim. & crocus metallorum
(usd. last hand. has gained ground) &
& f. calces precip. fr. f. acids by
alks. usd are now not at all
employd. — They require to be dissolved
in f. stom. by f. salts of f. they meet
with there — Some prep. there is an acc.
formed in the stom. — This is
rarely when f. stom. is in
perfect health — more frequent when
it is weak, & diseased. — But then
there is also common salt — sal
ammon. — phosphoric ammon.
(f. neutral salts of the body) & the

gastric juice — These fine Dissolvers
in the Stomach — These Receipts Gentlemen
have this advantage, viz. as the salt
goes on slowly so their solution is
for a long time, slow & tedious
& tho' they act more powerfully
& dissolve in proportion to the strength they
are made — but on the other hand
they are very uncertain in their
effects & tend this mischief besides
of being heavy they may fall to the
bottom of the Stomach & remain
there till they be accidentally
carried quantity — then act sudden
with violence, & produce immediately
so much as to do a great deal of
mischief — of this Dr. H. has seen
several instances — — of salts
entering Physic's more effectually
and better if can be defined
upon, if has hitherto been made
— It has a concealed advantage
of more conform in the
action, for we add this also prepared
of same mass — The Edinburgh
College Dr. Chemists their Pharmacopoeia
of Chemistry if — but they have lately
very fond of insinuating
taking in Physicians & Druggists
their neat receipts — They have
prepared the salt Tartarum
Pots & is that it — is of salt
spirits of salts, more readily
powerful — as much Physic, and

[illegible] into [illegible] crystals, & more soluble with water. but [illegible] more acid. ~~and [illegible]~~ a simple tartar is already [illegible] acid as it acts in tartar emetic above from a quarter to a 3rd. of a grain by [illegible] quantity the stomach will [illegible] with sickness — these are mere acids & have not yet been attended to be concerned in the antimonial — The other [illegible] of antim. seems certain in [illegible] is of tinct. antimonialis but it is, too stimulent to be used in acute dig. — These are the [illegible] remedies considered as [illegible] — very frosty these are [illegible] more.

Relat. of the med. of Rance Dr. [illegible] of the new comp. of [illegible] in mens. dis. — In fact there is certainly in various parts of the body — the opinion is daily [illegible] all of secret. are dimin. & the comp. of secret. organs [illegible] of system — Clar. Cause of the [illegible] made a crisis for [illegible] of disease — Dr. of [illegible] Rance [illegible] to [illegible] this opin. [illegible] crises following in [illegible] cases immed. on the exhibit. of them. Experience is seen [illegible] simple they have [illegible] [illegible] [illegible] [illegible]

Emetics have succeed. given in this dis. — But it may be remarked that there is not any single remedy which is proper to be used in all cases of any one disease — particular circumst. [illegible] must be carefully [illegible] the constitut. of the patient &c — for in [illegible] [illegible] [illegible] are [illegible] at the beginning fever in a great deg. — When the pulse is very hard and full — & there are symptoms of the head being affected such as internal pains in the head — redness of eyes & delirium in that case still we have recourse these symptoms it is improper to employ [illegible] in fact — at least such as have any [illegible] effect — It is true that they have been exhibited in such cases so as to cure the dis. — but there they have also been employed so as to do a great deal of mischief — but the harm done by an Emetic in treating a dis. is never attended to —

2dly. when there is weakness & a dispos. to partial secretion towards the ends of the vessels in these relax. cannot be employed with a view of [illegible] sec.n & relax. weakening the [illegible] — in all cases [illegible] in [illegible] &c [illegible] may be employed [illegible]

cong. advantage — we may have
also a better chance of cases of
g. s. p. the 1st day of dis. & the
g. 2d & g. 2d. than g. 3d &c. but a
time of dis. they just
[illegible] & cases of g. — or if
they do not they render [illegible]
in intermittg fevers more frequent
& dimin. doses but often go a
to prevent deliriums or other
violent & fatal symptoms taking
place — The relax. we use
in gout, are preps. of antim. —
Tart. antim. & ye the most powerful
of all, & the most to be depended
on, & we use to prod. a very
considr. effect — Injections with
cold water wh. have effect in
this case great — When there is
pain in a gut. fucac. is most
to prep. of antim. & is also in all
gut. a powerful relax. & may be
used freely so as to carry off dis.
Pills also be of practice to emp.
neutral salts in gen. — A pure
nitrat. tartar. pall. sal pol. charta
is the most use in London —
Saline mixture was formerly
very much in use & where it
is in use — In intermittg gout.
to prod. more frequent intermiss. of
sal ammon. is emp. — Some
digestive salt of Sepnius was very
much used — Almost all [illegible]

cases in which the [illegible] seem to
[illegible] have been good effect has
in intermittents by giving more
perfect intermission than other rem-
-dies certainly at the more convenient
[illegible] — Repeat of aperients & diaphoretics
have been found useful before the
commencement of an intermittent
to prevent the recurrence of the
fever. For this purpose, we
can usually join relaxants with
stimulants & narcotics — & accord-
-ing to circumstances we may use either
repeat of aperients or diaphoretics. —

Diet & Regimen

Relations equal in respect general for
the skin & other parts of the system to
the distinct effects of simple restorative
stimulants & only differ in restorative
strengthening matter of the small repairs
or preventing them from undergoing
contract & lose effect resistance to the disease
& cause the skin. of it — to change
when notice & applied externally
In treating febrile complaints we said that
warm water or steam if applied
exactly relax so as prep. to the skin
& cause the right action
right internally, are not of any
use in right general — but in right
in the right manner the small
repairs general take place of the
in the Infirmary just & after the

cumst. to take off in great profusion
on the surface of the body, & so ren-
der the inflm. by giving a fresh impet.
to the circulation & obtain resource, relax.
have to given in the consid. advantage
in all exhausting other, & of
a liquid have frequently found them
— Hence it is to be observed
that when there is any consid. deg.
of i. relax. are not auspicious, & that
as when the pulse is very hard, full
& strong — for they are apt to occasion
a profuse sweat & if we encourage
it by copious drinks, he exp.
heated & stimulated — & if he is ext.
he will receive warm diluents — cool
of evapor. of the moisture produc.
cold & deep harm — But if the i.
is diminished by evacu. then relax.
are and a duality — but we see very
proper in cases of prep. & antiph.
the cases — At the beginning there
is g. i. niche has to be held & the exp.
not know — giving it — & sometimes
the neutral salts — by their office
is not to be depended on — Do.
active harmony of the intestines frees
the body in dose for. of emetics
& action in the out. of the part relax.
may be given consid. advantage
And in simple fever sec. of the
mucous glands — as catarrh, diarrh.
& dysentery, relax. are often of g.
service — in such cases they dec
ndr unpropitious of themselves in
relax. & useful in rheumatism,
but in this case when there

(a) In spasmodic contract. of internal parts as of intestines — dysp. colic. chol. &c. relat. joined with spasm are very serviceable — Nor tho' spasm of itself might be sufficient, yet we have instances of success by joining relax. with it ——

(b) A mixture of relax. mercury & spasm is yet very serviceable in cases of most kind of cutan. affect. especially when there is a considerable degree of moisture ——

a considerable degree, there is the
same objection to them as exists
against opium & cicuta — but when they are
in such extreme cases they are useful
remedies — in spasmodic cont.
relax. often are of service in the
first stage — but they are chiefly
useful in spasmod. cont. of
the spinal cord — they tend to
take off flatul. — but stimulants are
generally preferable in this case — cont.
contraction as colica pictonum
is cured more certainly by
narcotics — In hysteric affect.
& those dis. which have commonly been
called spasmod. — as epileptic spasms
& others of g. kind they are but
little serviceable — some, they are
sure to take off g. present spasm
but as they tend to render g. system
still more irritable they are
not generally useful in that disease —
In tetanus, nept., relative also
useful remedies — All cutaneous erupt.
and hemorrhages the same deg. dis.
degree of g. tract when (61) Nervous relax.
by meeting upon contract of fibres
often effects a cure in such cases —
Wide distension in g. & other
dis. to employ a considerable dose of
relax. med. so as to produce a great
effect at once, but it is in general
better to keep up their action
gradually — To do this, one grain of
opium in such a quantity as just
to produce relaxation

[illegible] in 4 or 5 years — [illegible] are the [illegible] — [illegible] a very useful class of medicines.

Lect. 45th Of Strengthening Medicines:

Strengthening remedies are such med. as increase the power of the body, and the action of it — Fever bark is among the most powerful of these med. — for besides reducing the power of increasing strength, it has also that of diminishing irritability — & in a much greater deg. than any other subst. —

Peruvian bark is the bark of tree wh. grows in that part of the continent of America wh. lies between the tropics, or rather to the southward — There is a range of hills wh. are called the Andes, wh. on the west side are almost perpendicular to the sea to the height of nearly 4 miles — but the descent on the east side is very gradual for more than 100 miles — At the bottom of these hills is one of the warmest parts of the earth, especially on the west side, but as we go up in the atmosphere it becomes colder & colder till at the top of these mountains it is so cold that it freezes in summer ice so that there are perpetual [illegible] variation of climate, [illegible]

1 of Some Gentlemen say it was
Jos. Gascoyne, an Indian who
had an intermitting fever
Drinking at a place Sebastian cit
Mr. a Mr. J. Co. lately died
[illegible] fallen, [illegible] after been
[illegible] Days [illegible] Fifteen Minutes

under the equator, in which grows a considd. height are there not of the same in a very warm climate. Very probably it wd. grow in Europe if the seeds were to be procured. — The trees grow in thick forests & are thus. This is com. in this coast covered wth. a white moss of some considd. length — wh. after being pull'd off, leaves, shrivels on the bark — At diff. times, accord. to the various fancies of the European Practit. the bark has been brought to us from diff. parts of the tree — sometimes only from the smallest branches — sometimes from large ones, & sometimes from the trunk of the tree. It is a question whether the whole of it is brought to us, is of the same species.

The effects of Peru. bark in curing intermittent fevers, first fd. out by a lady, who had taken chamomile, wormwood or other bitters wd. wh. were employd in Europe to support the strength of patts. in intermittent fevs. & finding it of no benefit, a bitter of the same kind, supposd. it might have the desired effect — & therefore prescribed it — for the Indians knew nothing of the use of it. It has been call'd Jesuits, China, cinquina, China China &c. We gen. call it cortex Peruvianus — It has also

(a) The Cells may be seen by means of a microscope

frequently dealt in it — This plant
which comes under the class of
pentandria, monogynia of Linnaeus
having 5 stamina, & one pistillum
& its flowers are in bunches
grade or 4 species of the same genus
have been found in the East Indies
some of which have been employed with
success & others with success — but none
of them seem to possess the power
of the bark which is imported from
the continent. The same species
of tree has not been found — only
other species of the same
genus — By accidental [illegible] a bark
of a red color was [illegible] in a
bundle which was more powerful
in the same dose than any of which we
have been accustomed to employ — but
it has been more supposed that it
made some considerable difference
of species of tree. Some of it
comes from branches of the tree — some
from the stem — but which we do not
know —

The bark of
trees consists of 2 parts — the exterior
part which consists of cellular
is called cortex & the interior
bark which consists of tubes or fibres
is called Liber & this is the
part which gives in general any virtues
of barks in the greatest deg. & it
is very much so in the Peruvian
bark — though it is only the inner
bark we usually use of Liber

[illegible] a little [illegible] red
brown color which of [illegible]
"[illegible]" [illegible]
[illegible] exhibit [illegible] efficacy
indeed is the best test of any [illegible]
[illegible] — It has it [illegible] [illegible]
[illegible] to make a decoction in order
to form an attach — [illegible] doing this the
appear[ance] in alt[ered] [illegible] which we
shall be able to distinguish the goodness
of the Bark —

We may [illegible] of the bark
in substance — but it is one of those med[icines]
which yields its qualities to the stom[ach] when
in substance much better than in
any solution of it — When it is
mean[t] to destroy [illegible] it is
alt[ered] give it in substance — [illegible]
med[icine] use it in solution in water
for this purpose — We are to reduce
it to a fine powder & boil it gently
in water for about ten minutes
give cont[inue] the decoct[ion] longer as the dissolu
tion of the bark indeed — but it
coag[ulates] & spoil it — It has been made
use of in solut[ion] in cold water also
sufficient quantity be taken, a solut[ion]
of it may be made in cold water
as perfectly as by boiling — & in appear
ance it is an advantage, bec[ause] it is clear
& transparent but there is some
little diff[erence] in its effects, for many [illegible]
of solut[ion] made in
cold water, have not had [illegible]
as [illegible] — the
bark [illegible] to a very [illegible]
[illegible] the [illegible] [illegible]

[illegible] dissolve perfectly well in alcohol
If the extract of the gum or resin
[illegible] too much alcohol — but this
may be avoided by putting it into
a still, & drawing off a portion of
the alcohol — I feel taught that remaining
in the water at the time
of use. Some vapour of water or
alcohol to dissolve then we make
an extract of resin of the bark —
Bark of good quality produces a tolerable
strength of extract, much more
if may also be simply digested in
wine — or a decoction may be made
first of the bitter & powder, & a
pint of wine then may be added
This is the receipt to simply steep
it to make it agreeable to
the stomach for this purpose
cloves have been recommended as proper
to any other — when we simply
steep it in powder, it should be in as fine
powder as possible — and it may
be mixed with water — milk, or
wine & water.

The other bitter mentioned in Dr
Pallen's catalogue during fever
as well as the bark, are ranked
among the stimulants — but they
certainly do not act as stimulants
principally for bringing a great
infusion, giving it strength
[illegible]

a Genus of Compositae
a diff. genus of plants, but
taken from of plants of some
as abrotanum — absinthium vulgare
— Chamaemelum — artemisia &c.
Linnaeus & his usual mode
of changing names has called
these two genus by the
name artemisia; the one
genus the least made use of
he chose a generic name, & th
how he chose absinthium that most
made use of — This class has
are cardous Benedictus — carlina
chamaemelum santonicum —
lanuginosum — and the seeds of such
will have more of a stimulating
oil, & an acrid juice than the
bitters that is after hinc nascuntur
— amantorum amicitia cum
lavandula — gentiana centaurium
minus — — The next are some
of the Dodecandria gynandria
that contain bitter juices so as to make
them be rank under this class — they
are chamapitys — marubium album
dictamnus ~~[illegible]~~ alias & so of the
Magalos Jobes & consid. genus of
bitterial oil, & stimulat. to corp.
— tiffolium pulsatilla — cupulus —
These are the med. annual or
biennial — & fruch. of cypre
cum & zinc —

If a man has been in an assembly
of people, in a hospital, or infected
and taught by some accident
from such people, he is liable to
[illegible] There will be a [illegible]
[illegible] attack any individual person
[illegible] it will be death within to
[illegible] upon his health in 24 hours
[illegible] for 5 or 6 days — be on
[illegible] a man was encamped
in a [illegible] country the signal
[illegible] the [illegible] to
[illegible] other [illegible] attention
to our health as a preventative
[illegible] case, for they might be
[illegible] to prevent the
[illegible] actually affected
[illegible]

Lect. 46th

Transcen. Med. cont.

Peruvian Bark — In case of weakness of the primæ viæ with want of appetite, indigestion, flatulence, & frequent weakness or coldness of the extremities, bark has been given with great success. Mr. Hughes's Bangalore had been in contract. There is plethora, if are not there the causes of these appearances? He bark is not of much benefit, but sometimes useful. In this case, the other bitters as more powerful, chamomile, &c. are preferable as powerful in this case. Bitters given have been inadequate, & that is, either there are some objections to their use, or perhaps the quantity. If a person has been exposed to a case of fever, it may be prevented from by employing the bark. It should be given in large doses so as to prod. effect, if it does, then get rid of the cause by taken off. Some of the remedies of the same class have equally useful. If there is only a chance of exposure to the cause, tried to prevent the cause have any effect on the affected, as cases of gaol fever, is not necessary.

(a)

(2) In certain, [illegible] has given [illegible]
[illegible] municipal [illegible]
[illegible] Transgressors & Prohibitors have
[illegible] presented of return of
[illegible] Persons that are not to be
[illegible] depended upon

In intermittent fevers Peruvian bark may be employed to prevent the return of paroxysms. When the intermittent is clear & in warm climates, or in cold spirituous liquors in the fever & ague, bark or wine alone cures the dis.— then in the last intermittent or remittent we can get Peruvian bark is very advantageous made use of to prevent the return, or the continuance of the dis. Opium also be given in this case first the whole of the intermittent & in as large quantity as the patient will bear (a) We should allow the time of the ordinary sleep of the patient but give it in the light as well as the day-time — In intermittents in strong habits where the intermittents are imperfect or habits rich & prosperity equal.— for it will the concurrent stream into counteract & has been used to prevent the exacerbation of the fever returns but in this case it is very rare useful for as it affects the head & breast considerably it adds much to the danger of the dis. if it should not have the proper effect. In some continued fevers we are very irregular, running out to a length with any prospect of

(a) It may have the precision small
quantity, the [illegible] shown the mill
will be able to turn a [illegible]

(b) In this case, a [illegible] letter [illegible]
nearly the same effect

of their good meaning themselves,
but, it may be said, it is not
worth while to employ it for the
purpose but very seldom.

Cor. bark, & other bitters such
as wormwood, chamomile
&c. are used to support the strength
of the pat. in an intermittent fever
if we allow it to go on thro' its
course. — In cont. fev., it has
been found necessary to support the
strength of the pat.'s very considerable
weakness & debility of skin & tongue
are moist & cool enough, a decoct.
of bark may be used with a mean
to invigor. all these med. by strengthening
the system tend to occasion an end.
action of the vessels, & become so end.
of inflam. — Inflam. Consts. must be
treated in the same way as the
contin. of the inflam.
in the classes — only inflam. Consts.
are inevitable, as the skin
surfaces of cont. fevers & in
the ~~[illegible]~~ typhus keeps up the
inflam. but then the tonics will not
be suff. to keep it up except the
fever recurs very inevitable. Now
the division of inflam. does more good
in the last in the ordinary end

of tempera[illegible] Dissolution, [illegible]
[illegible] — Hence in epidemics &
empirical sore throat [illegible]
& often in [illegible] of [illegible], Pen-
lebe is a [illegible] in [illegible]
of inflm. — It must be given in
as large Doses as of Pot. [illegible]
will bear — There are mother of
of [illegible] of the same class [illegible]
[illegible] in [illegible] — But in [illegible]
spirituous [illegible] in [illegible] must be [illegible]
as of a [illegible] — In some [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
of inflm. — Now in such inflm. Pen-
lebe does not take off of stim. — It
does not prevent the essential with
[illegible] [illegible] — and therefore
not [illegible] [illegible] [illegible] [illegible]
Dis. has run on [illegible] [illegible] [illegible]
Pot. is [illegible] & it [illegible] [illegible]
[illegible] [illegible] [illegible] rather than
of inflm. — [illegible] [illegible] & [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
There are some exceptions [illegible]
in inflm. spirit. [illegible] [illegible] [illegible]
is [illegible] if [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] — and in [illegible] — [illegible]
[illegible] is [illegible], because [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]

also the warm [illegible] baths in
[illegible] of [illegible]
[illegible] a [illegible] quantity of
[illegible] in [illegible]
[illegible] that the [illegible]
[illegible] inflam[illegible]
[illegible] — [illegible]
[illegible] useful [illegible] and [illegible]
[illegible] in [illegible] the bath [illegible]
particularly in this case — [illegible]
[illegible] & [illegible] suff[illegible]
[illegible] already [illegible]
and the absorption of ~~[illegible]~~ [illegible]
or [illegible] surface of
ulcers, [illegible] the bath may [illegible]
with the good effect — In case
[illegible] where the free suppuration
& granulation does not take place the
bath is also useful [illegible]
[illegible], especially in
recent ulcers — In ulcers of
very long standing [illegible]
is [illegible] more efficacious [illegible]
there is no contra-indication
to employ bath & mercury together
Pure air is also very necessary
in these cases in diminishing the
irritation of the system — [illegible]
is also necessary, in order to take
off the effects of the system [illegible]
[illegible] & [illegible]
to procure a [illegible] of the head
[illegible] inducing [illegible]

a [illegible] be [illegible] [illegible]
inflict [illegible] [illegible] of Death
[illegible] into a [illegible] [illegible]
[illegible] accession suffered. [illegible] [illegible]

[illegible] Purchase [illegible]
[illegible] be given in large quantities
[illegible] of the Strengthening [illegible]
are [illegible] [illegible] to [illegible]
[illegible] — [illegible] & [illegible]
[illegible] [illegible] [illegible]
[illegible] —

Lect. 49th Strengthening Medicines.

In the first place Purchase may
be employed in rheumatism — There are
2 cases of chronic rheumatism occurring
at a time, they will [illegible] [illegible]
[illegible] & the other is free from pain
in the day time — In this case
Purchase may be employed to avoid
the return of the disease so as to
carry it off altogether — [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] — This is a case in
which [illegible] [illegible] [illegible]
if Purchase is proper to be employed
because for the most part when
there's a considerable [illegible] it is
painful — When the pulse is very
hard & full — & [illegible] [illegible]
rarely if it is proper to give Purchase
especially in very large doses — Respecting
some [illegible] brought into practice
[illegible] reluctance to [illegible]
the [illegible] [illegible] pain in the
day-time, & [illegible] [illegible] in
[illegible] Purchase may

[illegible]

[illegible]

[illegible]

a Folio volume [illegible] was
frequently consulted & was extremely
useful to the Trustees

[illegible] Pulse

affect.ⁿ — for it we [illegible] [illegible] was
not [illegible] — nor any other purgative
rem.ᵈ & the [illegible] is [illegible] [illegible]
taking [illegible] valerian [illegible]
may be used. It is rarely any neces-
sity — Tho.ʰ when yᵉ Dis.ᵉ is hastily
removed it is by large quan.ˢ the bark
given (1) the efficacy of intermitt.ˢ
bark is a remedy, it is of the
advantage — & there is no other
bitter med.ᵉ or medicine of
[illegible] w.ᶜʰ can be well [illegible] in this
case [illegible] — The other case
Rheumatism is where a habit
has arisen in the body of being
affected with yᵉ Dis.ᵉ — We m.ᵗ then
be employing the same remed.ˢ w.ᶜʰ
[illegible] in the cure of the disease
after bitters & [illegible] [illegible]
[illegible] as [illegible] as bark.
In yᵉ next [illegible] [illegible] [illegible]
other bitter med.ˢ as [illegible] —
[illegible] [illegible] [illegible] [illegible] —
In all cases of weak [illegible] except
where there is contraction of the
[illegible] as in hectic fever &
Rheumatic affection in
w.ᶜʰ contraction of yᵉ [illegible] is pointed
out by the pulse (6) — In all
such cases they are improper
& especially [illegible] [illegible] except in
chlorosis — where they [illegible] be [illegible] —
recommended — particularly [illegible] [illegible] —
But it is not [illegible] [illegible]

[illegible] Mr. [illegible]
[illegible] or any [illegible] of the [illegible]
affection [illegible] from a [illegible]
[illegible] very useful — but on
the other hand where there's any
deg. of tension [illegible] it is far
[illegible] preferable. Much
[illegible] will prevent the [illegible] of other [illegible]
[illegible] by sharpening the system
[illegible] when there's no disease
present — when one wishes
to give little medicine to strengthen
the system it is often useful
to mix them together into a single
[illegible] had
[illegible] or one set
of bitters & then [illegible] a fresh
set. It is frequently useful
to omit the bitters for three
for 5 or 6 days, & return to them
again — In hysteric affections
bark is sometimes very [illegible]
[illegible] — When hysteric fits are
[illegible] & have lived relie-
-tual [illegible] may be given to prevent
the recurrence. In other cases of
[illegible] — In this
case we will [illegible] it in a bottle
does as well, or [illegible]
this we recommend [illegible]
in the time of [illegible] — but
it may be given also when [illegible]
hysteric [illegible] in [illegible]
[illegible] affection has [illegible]

a Sound. They are — but it seems
where the Systematic fact is accounted
for or arises from mere [illegible]
& lately — while on the other hand
when it arises from the Progress
of the rarely if ever and so of the
clots are found organized — and
when it what could some hand
[illegible] Strong and [illegible]
to any of the other [illegible]

sometime become [illegible]
def. habitual, it is rarely the
Practitioner or the latter indeed are
[illegible] — In fact pre-
[illegible] has made [illegible] in counteracting
all kinds of epileptic spasm
if the system be in a sound body
is worthy of inferior [illegible] of
returns of the paroxysm but
afterwards [illegible] from [illegible]
[illegible] and [illegible] more efficacious
[illegible] of the return of the
dis. [illegible] — [illegible]
there be a few many cases of epileptic
spasm which will [illegible] this malady
cause or cause the whole lifetime
[illegible] — [illegible] in [illegible]
[illegible] can be cured — [illegible]
Chorea Sancti Viti — risus sardonicus
tetanus — & other dis. which have
been considered as spasmodic it is
rarely that these remedies are
[illegible] except where Chorea
Sancti Viti arises from [illegible]
or [illegible] — for the
strengthening of system will cause
it [illegible]

The gout is a dis. which has been
considered [illegible] not only [illegible]
but many other [illegible]
respect that [illegible] have
stimulus have prevented its
return — But it is to be [illegible]

a [illegible] of the [illegible] lands [illegible]
a bitter one [illegible] [illegible] given [illegible]
for the [illegible] [illegible] [illegible] [illegible]
time [illegible] [illegible] [illegible] [illegible]
of the [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]

[illegible] a [illegible] in many cases, [illegible]
[illegible] of the [illegible] has been
prevented by bandages, the little
aspirin has [illegible] in the course of [illegible] (a) of
the [illegible] in ordinary
cases of gout, and such medi-
cines the gout is worst of
the pat. should [illegible] much of
it, cause bitter & strengthening remedies
have power to [illegible] the adminis-
ter [illegible] medicines that
has been just a step to the [illegible] remedy
[illegible] will justify before it — and
are equally [illegible] except such as
have any astringent qualities
to be made use of. —

Sect. 48th Strengthening Med. cont.

Observations relative to
a stimulating diet, is simple in
comparison to strengthening remedies in
habits which have a considerable de-
gree of laxity in the good effects — of this kind
are the cardiac acc. in cases
of jaundice — when bile is prevented
from flowing into the duodenum the
intestines are weak, their peristaltic
motion does not go on [illegible]
Bitters, med. with a laxative
effect of stimulants are then successful and

Dr Hancock's Prac
relative of Gaspard & an inter
-mitten by means of Shaw.

[illegible] Physicians have [illegible]
often occasion to give warm ani-
to liquors, infused in warm
water alone — & perhaps when cal-
ward an emetic Wine as a
relaxant.

Antimonium & Tartarum have
been given in cases of worms — but
we do doubt, from a little experience
in the infant, on 2 grounds — 1st
bitter vegetables are poisons to all
insects & 2d by shaking off a cattle
such medicaments of powers of
digestion — Tear it is only a weak
of the powers of digestion of prevent
the ova of worms, & after
themselves, in the digestive & secre-
tory — Hence the good, that
remedy in destroying such insects
besides there —

Chamomile is a bitter & has
been very much made use of
for strengthening & diminishing
irritability (a) — It has an agreeable
flavor, & that accounts for its
being prescribed as a bitter & strengthening
remedy — when we give it in
large doses, it is apt to prove
narcotic — These are
the principal plants of the compound
plant of Singinga & are
employed in fever —

There are a [illegible] of bitters in this class of plants and it is unknown to the botanist and medical tyro to make a choice in selecting most medicinal, and we find them very powerful.

All of the species of Gentians have a bitter juice in their roots & perhaps particularly throughout the whole plant. This bitter juice is accompanied with an essential oil that is very agreeable flavor & renders the useful. There plants in general are in a concrete state, does not contain much the use, as in extract. The manufacture there is considerable in these cases they are emptied into copper & distilled together with the other bitters that they themselves for the quantity. Should oils in gen. be considered a simple ——

The Gentians form a very extensive genus of plants ——

Centaurium Minus one of the in flower in the case the can be and should be very agreeable to the stomach & will render it an useful bitter in cases where tonics are indicated. — This valuable

of this bitter infusion [illegible]
has fallen almost totally out of
practice — & that within a very
short time. Indeed the Bark
has in many cases, assumed the
place of almost every other
med^e. bitter in the Mat. Med^a., since
w^h. propriety — for as far as
I am informed the Cortex [illegible]
are [illegible] fully as efficacious as the Pe.
bark — The root of the
Gentiana ~~[illegible]~~ officinalis is
also a really pure bitter & th[illegible] has
w^h. hou^d. been exhib^d. in large
doses for the purp^s. [illegible]
[illegible] is [illegible] —

Acorus Verus was also a bitter
very generally in use — but is now
entirely [illegible] — but in my opinion
it has a warm stimul^g. essential
oil w^h. in cases of debility makes
it useful — It is by no means
proper to reject so many bitter
med^s. as Practit^s. have done — but
on the contrary, as the habit
is so very ~~[illegible]~~ apt to become
accustom^d. to any one — or any with
them when they begin to lose
their effects may switch, we
ought to retain several at least
~~[illegible]~~ and besides, often where one

[illegible] given one bottle [illegible]
[illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible]
Guaiacum - Sarsaparilla - Sassafras
are species of [illegible]
[illegible] to send them [illegible]
the Linnaeus [illegible]
contain a concrete gum [illegible]
a stimulant & [illegible] [illegible] [illegible]
bitter juices. They have been
[illegible] in jaundice -
also to prevent the return of
the gout in which they have been
[illegible] - but as [illegible]
and they have of late [illegible]
[illegible] - & [illegible] [illegible]
means, to be [illegible] in gout.

Letter of Washington to Congress

[illegible]

[illegible] supposed from [illegible]
[illegible] of the day [illegible]
[illegible] the pain [illegible] neither [illegible]
[illegible] by [illegible] beginning [illegible]
[illegible] of [illegible] days [illegible]
[illegible] — We [illegible] not
certainly [illegible] this as a [illegible]
proper practice if it were not [illegible]
therefore [illegible] effect [illegible] by giving
[illegible] — which [illegible] to wash off the
putrescent [illegible] & salts
of the blood, & [illegible] [illegible]
[illegible] a tendency to accumulate,
in particular [illegible] of the body
[illegible] [illegible] [illegible] of
[illegible] — [illegible] account of [illegible]
[illegible] no solid food be used in
[illegible] [illegible] [illegible] [illegible] some
[illegible] [illegible] [illegible] [illegible] [illegible]
to be given to drink — In the 2d
[illegible] if we empty the bowels by
[illegible] the 3rd we must
do it by [illegible] & [illegible] make a
greater flux of blood fall on the
[illegible] glands, & the parts near
them [illegible] to alter the circul.
[illegible] — so that all [illegible] [illegible]
[illegible] occasion an end, 2d of the
[illegible] indeed, but [illegible] [illegible]
but making an [illegible] into
the bowels by [illegible] a [illegible]
the [illegible] [illegible] [illegible]

a more perfect [illegible] the
same particles of blood

[illegible] in the venous & [illegible]
of vessels almost equally [illegible] —
experiments were tried — but now
known that the blood does not
remain in one set of vessels
but is in constant motion from
the heart to the extremities & back
again to its original source —
This ~~[illegible]~~ degree of rapidity with
w.ch ye whole bl.d of ye body must
pass thro' the heart in a short
time — suppose there be
lb. 30 of bl.d in all in the bl.d vess.
& that ye heart throws out ℥ij at
each contraction then in 8 contr. lb.j
will be thrown out & hence in
240 ye whole bl.d wd. have pass. ye
heart w.ch no. of contr. wd. be completed
in about 3 1/2 minutes — The
bl.d therefore is never remaining
any time together — but constantly
changing & moving together through
so that ye bl.d in all ye diff.t parts
of body must be exactly the same
the venous bl.d differs from ye arterial
indeed — but this change takes pl.
in a very short time — in its passage
thro' the capill.s into the veins — and
give were to take away arterial bl.d
it wd. be very soon rapidity changed into
venous bl.d by the body — & this

[illegible] [illegible] [illegible] [illegible] as far
[illegible] [illegible] [illegible] [illegible]
[illegible] of the body [illegible]. The
[illegible] [illegible] [illegible] reasons [illegible]
[illegible] [illegible] naturally [illegible] from
[illegible] of bld. [illegible] the
[illegible] in diff. parts of the body
[illegible] exactly the same as that
taken from [illegible] [illegible]

In the 2d. place the [illegible] of y
vess. communicate so perfectly that
if we take away a quantity of blood
from any vessel the blood will
be immediately supplied by the heart
for if any resistance be taken
away to the passage of the blood to
any part of the body, then the
bld. being there resisted
a greater quantity will flow into
yt part where the resistce. is
least — & then by making an
opening into any vess. the bld. flows
out there is there the least
resistance & consequently that bld.
will be immediately supplied by
the heart — and the small vess.
open into one another so readily
every where yt in particular
parts of the body bld. will be applied
to any vessel from whence some

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Lectures on the Materia Medica By Dr. Geo. Fordyce.

No. 1

[illegible] in [illegible] in the
country, in [illegible] of full [illegible]
me many [illegible] acres 30 or 38
[illegible] stand, as one half [illegible]
[illegible] has a [illegible] official [illegible] of
some quan. of [illegible], [illegible] at 30 or
40 times or some [illegible] than double
the quantity — If [illegible] unfortunately
[illegible] away after a certain
quantity has been made, [illegible] have
[illegible] found of a case where they
did not record from such a family
[illegible] — The painting [illegible] ground of
the present [illegible] to agree
further [illegible] that [illegible]
[illegible] just when the blood
[illegible] to flow [illegible] care [illegible]
may be [illegible] of the [illegible] affirmed
in such cases all that can be
done is to lay the [illegible] in a
[illegible] position till the recovery.

Lect. 31. Wednesday [illegible]

[illegible] necessary [illegible] inflammation [illegible] to be [illegible] away [illegible] in [illegible] is not [illegible] most powerful remedy — [illegible] of inflammation [illegible] part accompanied [illegible] a considerable degree of [illegible] exactly bleeding is [illegible] also [illegible] the necessity of adequate [illegible] [illegible] brought to the [illegible] original cause of phlegmon be [illegible] and in many cases where it is not [illegible] the [illegible] is carried as long as [illegible] special [illegible] it is [illegible] also [illegible] — [illegible] is seldom or hardly ever, any mischief arises from [illegible] weakness. There's [illegible] a [illegible] phlegmon [illegible] accompanied with [illegible] fulness & strength of pulse therefore in all cases of phlegmon of any part of the body where there's any chance of the [illegible] depending by the disease, where the phlegmon is pure & not intermixed with any other disease we make large exactly bleeding [illegible] so as to carry off the disease — [illegible] with a phlegmon [illegible] there [illegible] the [illegible] phlegmon [illegible] in a very [illegible] part of the leg where [illegible] and [illegible] instrumental [illegible] [illegible] [illegible] system [illegible] seldom [illegible] to be [illegible] to [illegible] [illegible] the [illegible] in this case [illegible]

[illegible]

[illegible] of the pt. & bad [illegible]
if J. C. has had, very much [illegible]
the will not have strength to carry
him through the dis.d — Cases of this kind
have constantly prod. such effects, & I
have looked bled.g such in all
cases of inflm. — pneumon.y inflm.
& inflm. of pleura, mentioned, where
pint & not intermitting with the pneu-
mon.y, bled.g is of no kind of use
but rather detrimental — hepat.y
inflm. bled.g from near the liver is in
all cases very powerful & will keep
some men if there are bled.g &c. —
system in general — Some have
found it of other gangrene & mortif.n
have been prod.d. Tetanus was still inflm.
& rendered it necess.y to bled — but in
all cases of wound, phleg.n inflm. have
terminated in gangrene & mortif.n a gangre-
ne of gang.d has begun & inflm. has
in Schang.d into suppur.n one &
only of inoculat.n have taken place — There
does not appear to have been any
instance in which bled.g has been useful
in this case — but a few alt.d deriv.n
when any cause of topical inflm.n
has been apply.d & inflm. has not
arisen — when there has been an
algor — Louise on other inflm.
has been a question whether we should
take away blood immed.y on the

wait till the inflm. has taken place
& then take a way but to remove
it, because these causes of inflm.
will prod. inflm. in a much less d.
as well as in a strong one — If
has been thought contrary that we
should only send of a Pat. much prone
inflm. take place & if we did, could
it be by the bled. after the taking of
place — Dan. of prevent. in these
cases is to bled immedy. before the
inflm. has taken place or before it
has encr. to any consid. de. — In
inflm. of have gone on for a
consid. length of time as those
of eyes peritonaeum &c. the
parts where phleg. inflm. are apt
to continue a long time with. consid.
to suppr. topical bleeding is gently
more powerf. than bleeding from
a vein — and much by bleed.
repeated at the intervals of 2 or 3
days, are coming more efficac. in
carry. off inflm. than large evac.
by the lancet. We cannot carry it off by
large evac. made at once but we
may by smaller ones repeated —
If inflm. takes place with any of the
inflm. on the dist. as some of those
than large evac. by bleeding may be
employed to carry it off

a Man is in health & will
lose away a quantity of blood a larger
one is gained than will diminish
the & the blood grows thereby a
habit of health a larger quantity of blood
should then be produced whether
there be any means of preventing

of f. i. shd take place if it had not
fleshy & fragy but contract. & of f. f.
& shd. often arise, of itself on the ly.
only dis. or shd arise from an
cause there is only mod. measures
& mc. of mot. mens. pency. of f.
& one dell. of dis. Hectic fever of
spec. of f. i. cannot be cured by a
mach. by bleeding - nor of much -
by bled. of to ℥ quan. of ℥xx or ℥xl &
repeated for the mach. for 5 times at
intervals of 2 or 3 days on some.
mesh is often of cond. use in
order to carry off such hectic fever
in cases of plethora where it is
doing any immed. mischief, a
quantity of b. b. taken away is the
most ready mode of removing it -
but in habits of a aptt to bed. ple-
thoric, repeated bled. so far from taking
off plethora, may induce it - for
the organs of digestion supply a suff.
quantity of chyle - or there's a suff. quan
tity of chyle in the blood to supply any
loss there may be in the b. b. mass.
So that frequ. bled. is often of some
may of occasion a plethoric habit
& herself when a person is in health
bleeding is alw. hurtful
There are cases, where in inf. Ch.
repeated moderate bleeding is, & in fe

with advantage also it proves a powerful
of Nature of itself — but is in
cases where there is full & strong
habit — for in this case bleeding
of course must — In such cases
in general in proportion
of the strong habit, bleeding takes
of disposition to excess — As to the
of inflammatory membranes & in
both these as well as in all these
cases neither bleeding nor system so
far near the part has any effect
of gr. aire in gen. & that of
the Lithely to cure but to a great
or is attended with symptoms of violence
that the same time there be pain
in the head — weight about the
procedia & gr. depression of strength
where the dis. is likely attended
be attended with weakness that there be
a course of dep. of gr. we ought not
to take away blood, if of gr. does
not aire in a dep. so as to threat
danger — In rheumatism also that of
inveterate habit or in those living
in an impure air that of gr. is the
very cause it is very dangerous
frequently to take away blood — or in
of small not where there is a great dep.
of gr. with where of gr. is more
dang. in itself, it is just upon the
bed. we see a rash of scarlet

the frontal sinuses so do the upper part — In the same manner the sick wine in any dis.e we should consider whether the general exhaustion is injurious or if dis.e & if this, blood will never be employed unless it be such as to threaten the immediate destruction of the patt. —

Sect. 51st Weakening Remedy. cont.

Bleeding is a good use in deaning on cases of Apoplex. chiefly in gouty habits we see the well understand. When the eyes are red — the adjacent vessels full of blood & the vital headach or delirium in the blood either by applying leeches to the temples & opening the other jugular vein but in many cases can't do it. In other cases, bleeding is only useful in part in cases of p. i. when any of the Symptoms of Plethora — & cases of Plethora the lightness i. more plethora this is improper — Some p. in intermitt. there is vital p. i. the events perfect in the vital p. ~~tal~~ pl. — In this case in a. de i. procure perfect intermiss. tal.

away a small quant. of blood is very
good in rheumatism. This exact is of
use to take off the rheumatism
but when rheumatism is attended with
much g. i. (called acute rheumatism or
inflammatory rheum.) if in a climate of
warmer temperature, in the country,
& in pure air, bleeding may be
empl.d advantageously to carry off the inflam.
of rheumatism in this case not so
much concerned — but in in London
& in warm climates, bleeding often
occas. metastasis to the interior parts
of the body so as to prove fatal &
therefore is not to be used — in
acute rheumatism inflam. often takes place
to a very great deg. in the part affected with
rheumatism — Now bleeding from the part
leeches will often remove the pain
we should be prione, have emplo.d
this — for we should suppose the metastasis
would take place — but we find by experience
that it does not — We may bleed at
the part so as to carry off the inflam.
without any danger of metastasis
if there should be even 5 parts affected
we may bleed for all of them
without danger of metastasis —
rheumatism suddenly & in full cases
habit, bleeding is often of use — the

are to suppose in this case, is thus
sufficient for the bed to be made, upon
the part itself — but when, upon
a hemorrhage, & cutting of blood flow
out, we in the 1st place, make a
quicker evac.n so as to make the
body weaker — for the bed flowing
thro' the orifices in the part, & as
the haem. comes, tends to keep them
open — Bled. is more especially wd
with advant.e when the haemorr. arises
from incr.d action of the arteries (called
active haemorrhage) — but when
haem. arises from weakness of a
capity, it is by no means useful.
In opposition to this exact.n
is same.s useful if the pat. be
strongly reduced, then to a weak
& irritable state. by wh. they may
easily be carried off

Lect. 52. Of Narcotics.

Narcotics are a class of medicines which have been called stimulants — some have considered them as producing stupor as narcotics — Hence they have included under stimulants such as particularly a class of stimulants which are known by the name of cicuta, belladona &c. — But these have only the effect of producing stupor without any other effects of narcotics — Narcotics besides exciting stupor, in general act as stimulants in the action of the heart & arteries — Now they have been mentioned as stimulants but as sedatives rather because they tend to diminish the force of the pulse in many cases — At the same time that they tend to diminish the force of the pulse, they increase the strength & fulness of it — increase in the blood vessels & take off languor from all the effects of stimulants — Why are they to be considered as stimulants rather than as they render the pulse slower — At the same time that they act as stimulants they act as a strengthener of general repute to contract so as to produce a general stimulation — stop the circulation in the extremities & in short the action of the heart — Breathing — They have an effect on the body — Breathing — It is an effect that does not want a [illegible]

of time — so that great relief was
follows after their operation & one
hence they have been considered often
as sedatives. — They diminish the sensibility so
as to prevent pain for causes that
would otherwise produce it. — They also
tend to diminish the irritability so
as to prevent stimuli & the causes
of disease from producing their effects — for
they diminish the sensibility in a great
degree than the irritability of the system. Hence
their property. They are antispasmodics
& among the most powerful of the
class. & lastly, they produce sleep.

Now narcotics consist of wine
& opium — Wine stimulates — opium produces stupor & diminishes
irritability more, so that we generally use
them for diff. purposes — Wine
contains the alcohol & many
have conceived of this was the
part of it that was narcotic but
we do not find the effects of wine
exactly produced by a mixture of
alcohol & water in any proportion.
Wine therefore is a vapor & is constituted
thus as long as it is wine. Wine
contains this vapor in combination & gives
are much more powerful in proportion
to its strength than those in which
the same proportion of alcohol has
been added to this vapor. Wines which are

very brisk as champagne & ferm
is — & those w.h contain mucilag.
matter as ale & beer, intoxicate much
more than for the quant. of alcohol
they contain — Perhaps this vapor
either is in itself — or the
spirit of alcohol combined in produc
the effect — A great part of the vapor
thus rises, is gas (what kind, I know not)
fixed air, fluid gas has not the same
intoxicating effect as the vapor arising
from wine has, when it is found
when get from health or any other
subst.e — Gas then is not the sole
not the sole vapor it is contained in
wine — but another w.h is called by
Van Helmont, gas sylvestris. — The
action of alcohol is much more
creating w.th. of wine & leaves a
quick lancinant — Any mixt. of
alcohol & water leaves a great. lang.
than wine, & debilit. of system sud.
more — so that for an medic. purp.
wine is preferable — Alcohol
applied to eyes acts as a powerful
sed.t but without any narcotic pow.
It is only when applied to the
mouth — nostrils — from the intestinal
canal of wine acts w.th a
narcotic power — Applied to

The skin, either wine altogether or alcohol acts as a simple stimulant & is often employed in the cases of man as a sedative — The action of wine is entirely on the stomach — Effects are generally over in abt. 6 or 8 hours, by the time it may have come to get into the system & give its peculiar effect — A large quantity of wine, or a bottle of alcohol & water taken so as to produce intoxication as soon as it gets into the stomach — If the patient lives you can have afterwards he is generally sick — This patient said it wine or liquor acts indirectly on the stomach —

Wine differs in medicinal properties in its strength & mildness. Weak wines are abt. apt to form in the stomach — some flatulence, & acescent and pain & rarely not simple — We should abt. use strong wines for med. purposes — Wines in perfection & genuine form — some have peculiar flavor so as to convert their perfectly into wine, as port & claret — while others have it imparted to some thing, as medicine which generally affect an obscure

A when they have little or no
capital from others they may
rarely afford any thyle or
blood

fermentation of 12 years stand is
what is called rancous — and
such wines unless they have been
kept such a length of time that their
obscure fermentation has done what
the active fire in other wines are
in respect to be capable in medicine — for
only those of three fermentations ought
to be used — Subject of Brewing
as to prod. by a better in of operation
as to management of it — and
they are more capable of being
made in large quantity — and
wine is made in large quantity — and
small such ought to be equally
well fitted wine equally in medicine
be neither very brisk nor very flat
when it is very brisk its effects
cease for a much shorter time — if
when very flat it does not probably
produce as strongly — time,
it produces a kind of flurry — if not
of transient effect, we cannot do
when we employ them in medicine
For the same reason it is better to
employ wine than ale or beer in
home & large quantity of spirituous
in their raised — Since reading
i) Thus the strong & mild fermentation
are the two in medicine in general
to alter effects, because they final
round themselves (a)

Mountain wd. be kept 10 or 14 years before it is drunk — Sherry, 8 or 9 years — We rarely have them at first & but if we have wt. mountain is apt to be heavy for, unless there's a quantity of native ref. acid the effect of fermentn. in the fruit w. makes it with madeira & sherry next country — Rhenish sweet wines if kept a suff. length of time, are probable in mode

Lect. 53d

Narcotics cont.

WINE may be employed as a stimulant to promote digestion when indigest. flatulency & acescence takes place. It has been conc. of a mixt. of alcohol & water was better employd than wine but in practice we actually find of a mixt. of these is more apt to prod. flatulency or acescency than wine — Tho' consid. of matter à priori we wd. be led to believe differently —

Wine is employd in gen. for support of strength towards the latter end of fev. — It is of best stimulant on

act. of it's ~~[illegible]~~ narcotic power
& only if we can employ — the
man in as much effort to the
matter of weight prod. agst. wine
is also the most powerful remedy
to prevent it — he might as well
in power, in proportion suppose
but a good stimulant some of the best
to assist good relief in infl. but can
supp. when the latter is effected to
take pl. quickly — he enjoin. infl.
wine has been used a stim. to take
it off — Enjoin. infl. has some
in common with opium & perh.
in this that by making of whole or the
act more powerful we take off
the partic. action of a part — However
the bath is much pref. in enjoin.
infl. — he gangrene & mortif. wine
is also a powerful remedy & indeed to
prod. of relief in infl. it is necess.
for the esp. of the dead part — for
hysteric affect. if there is at any time
tendency to sinking from weakness
or when there is only determin. of
the surface to the inter. parts of the
head, if there be any tendency
in the female sex — or in the middle
part or when the rest pales or in
the interior parts of the body —

In all such cases, there is a very
quick-acting stimulant & may be
often employd with good effect —

Opium is the juice of a poppy wch
grows principally in Arabia
& other parts of the East — We are not sure
whether we have any species in this
country or not but all the species of
the genus of Papaver wch are recd
numerous contain opium. The
white poppy of the gardens we have
in this country cont. the largest
quantity — Some have cond. that
was also ptd in some other plants
for if we cut the poppy there flows
out a white juice like milk wch
is of a bitter taste & dries into the
perfect opium — Now the natl class
of plants wch are by Rays call'd flori-
flores, as endive, lettuce &c. if they
be wounded a bitter juice flows
out of a milky color — & they have
a narcotic power wch
has made some suppose they cont. opium
as well as some of the other plants
wch compose flowers — & most they
have opium, tis but in a very
small proportion & the whole is
the bitter & milky juices wch
are not opium — Perhaps it is more
in a different state wch has been

small narcotic power — The best
opium is procured by wounding
the capsules of the poppy while the
seeds are ripe & receive the
juices w.h flow out — & to dry it
in the sun — There is little of this
opium comes into Europe — The
best is procured by taking the capsules
are commonly called the heads of the poppy
after as much opium has run out
as can be & expressing the juice of
them — This is sent to the best opium
of we get in Europe — The worst
is made by packing the juice out of
the whole plant & allowing it to dry —
The opium here prepared & the best, then
it is uniform in its appearance & is
more solid, a mass of it into a box by
pulling ~~them~~ off pieces of a brown
colour & somewhat transparent, w.h
an appearance as if it were uniform
mixed with a fine powder — The
liquid, & the opium, it breaks off in
a glassy surface with an appearance
of crystals matter in it — If it
has any pieces of the stalks of the
poppy, we may be almost sure
of this — it has been extracted from
the whole plant & therefore inferior —

Dip to a shaving dish quantity of water & letting it remain a piece of linen, wetting what remains with a little ~~water~~ alcohol & letting it lap that also — then ~~rubbing~~ the whole, & wash the water again with a gentle heat.

sort — when moist it contains
1/3 of its weight of water — As we
give opium in small doses, & expect very certain effects from it
we ought also to take care to
strain it before we employ it so
as to separate all foreign matter.
Opium may be adulterated in
subst. — but if we wish to see if
in such small quant. it ~~that~~
scales will not weigh it exactly
we may cut it with some solid subst. — Now
if we come to opium was exceed
ingly bad in consequence
of bad quality, it will
destroy the body — & therefore spices
have been added — but they are not
either necessary or proper — diff.
mixt. of spices & opium (when its
necessary to employ spices in opium
are necessary in diff. constitut. — or
therefore better to keep the opium
in a form other subst. & to mix
up. opium it as and to form it in
a solid form — but then care
must be very careful to mix
them together so that there may
not be more opium in one part than another

Opium may frequently be exhib.d in solution, & divide it into small doses — We dissolve it either in wine or a mixt.e of alcohol & wine, w.h is rather preferable — Opium dissolves very perfectly in either, and at the same time it is readily applicable for injection, & thereby may be made more effectual, & at a time when it is to be used in 6 or 8 months — The juice of the white poppy has been employed by lieg combined with sugar so as to form a syrup — or some of the extract of the white poppy has been employed for opium — This is more uncertain than opium in its dose, & needs consider.n — but then on other hand, opium is apt to produce spasmod. affect.s & the system considering the action of the white poppy has been suppos.d to have lost of this effect — it may indeed be used in some cases where opium particularly disagrees, & some of the advantages

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Lect. 54th Narcotics cont.

Opium is said to be a stimulant
[illegible] a person
[illegible] under fatigue [illegible]
[illegible] fatigue [illegible]
[illegible] effect [illegible]
[illegible] in this case
[illegible] effect [illegible]
[illegible] — The effect of opium as an
[illegible] quick, but [illegible]
[illegible] length of time —
[illegible] effect of [illegible]
[illegible] in the [illegible]
[illegible] in [illegible]
[illegible] in the [illegible] when there is no
contra indication to such an action in
catarrh & dysentery. There in special
cases, opium is still the best astringent
we can make use of — or in any
purgative where it should be at all
[illegible] when we want in medicine
to check the secretion — Give quick
opium either in catarrh or [illegible]
[illegible] if it necessitates [illegible]
the dose so as to exhibit it at least
once in 8 hours — It is not
requisite to give very large dose in
one, excepting in the [illegible] of
[illegible] — Account of 3rd Part of Pag.
is sufficient for a dose, as it leaves as
considerable [illegible] after it opium
is over, so as [illegible] to purge — Opium
[illegible] a considerable dose of opium [illegible]
its effects [illegible] a narcotic are [illegible]
[illegible] opium [illegible] on [illegible] — [illegible]
[illegible] [illegible] [illegible] in more [illegible]

ala i.e. in Cholera Pictorum it is
advantageous — In this case
we shd be very cautious of
mistaking infl. of the intestines
for that disease —

quan. [illegible] Dose magistral [illegible] before [illegible] of the
[illegible] are [illegible] of opium
[illegible] all other med. of which is a [illegible]
[illegible] in effect to act as a simple [illegible]
[illegible] of which this [illegible] to the [illegible] in
a [illegible] sensibility [illegible] it acts as a [illegible]
instead of an astring. — Opium has [illegible]
empl. in gonorrhoea also but [illegible]
it has been rather to prevent the hair
arising from the shock of the [illegible]
of sensibility of the [illegible] upon a
[illegible] — Altho' it has been [illegible]
gen. practice to employ it in this case
yet Dr. G. thinks it rather detrimental
than useful, as it appears to act
more [illegible] effect. of [illegible] the
[illegible] by its stimulus —
Some have [illegible] lately that it has a
power of detracting the nervous [illegible]
but this it does not seem to possess.
Opium is a powerful anti-spasmodic
[illegible] in affects. of the intestines
[illegible] flatulency its powerful as an
anti-spasmod. but it not worth
while employing it, effects as a [illegible]
use of opium tends to weaken the
intestines, so as to occasion spasmodic
contract. so that those who have
been accust. to make use of it have
been obliged to cease repeat it — in
a spasmod. pain affecting one in a
[illegible] opium is very [illegible]
useful anti-spasmod. [illegible]

powerful species — It is a remedy of
great efficacy when any of the biliary
ducts have contr. so as to prevent the
stone passing into the duodenum &
jaundice & also when jaundice is
an accompanied. compl. of any of the bili
ducts — in cases of stones formed the
ureters the duct they contr. are the
concretions & prevent their passing so
the opium is a very powerful remedy
in spasmod. dis of ureters & urinary
In all these cases of spasmod. compl.
it is necessary to exhibit the opium in
a full dose — in regulating of alvine
a pain — in hysteric affect. opium
is also one of the most efficacious
as an antispasmod. — It is indeed
a powerful in cases of hysteria
a prototype of the dis. full and the
irritability of the system, & leads to good
fresh & spread & spasmod. affect
especially in habitual pt. are weak &
such cases sys. & diaeodic is perfect
in spasmod. pains w. rather the
pt. at the time of paroxysm
opium is more powerful as the la
of the false pains & they are the cause
& induces the regular evacuations of a
mech. to delivery — Opium
has little effect on spasmod. dis
of a hysterical kind — or in spasmod.
pains — in chorea sancti vitti or
nervous sandaceus — in tetanus

2 Nisi ~~[illegible]~~ Attalus [illegible] his
[illegible] other [illegible] than of [illegible]
[illegible] - for when he [illegible]
[illegible] the season gradually wear
off

it has to much wind [illegible]
that the wind will rear [illegible]
opinion in this case — more the
wind destroy the Pat. in death — there
were pain has frequently been given & found
fit in 24 hours — but Dr. G. cannot
satisfy himself whether opium was
of any use in tetanus or not — as it
increased wind & anxiety, & as
the Pat. frequently died when opium given
& sometimes recov. when not given.
This hour. The practice at present
to employ opium in large doses — at
least a grain every hour in this
dis.e Opium has been
represented pain (pain is indeed
an evil but it is most commonly a warning
but it is most commonly a warning
of some dis.e & seems intended
by Nature to give the Pat. time to
apply remedies to avert, or carry off
dis.e — & therefore we are by no means
in all cases to endeavor to prevent
it — by the infl.ce of opium
for instance, pain is certainly a great evil
& does great mischief in the system
because it prod. a great perspir.n &
tends to suffocate the Pat. which
infl.ce must be on with the Pat.
unconscious of it, suppose a ball
into the cavity of the thorax &
take off a leg or arm & some pain
opium must be only to be employed to

a ... for ... if ... applic. contact,
a caution to the skin

6) As specific prevent. the invidious
Revulsion of the body, if a Patt. be
exposed to any cause of disease
as infection, exposure to cold,
&c. &c. it may be used to prevent
the action of such cause on the
system. Adverts.

prevent pain from one & lend at the
same time to take off the cause of
that pain — If there be pain from a
stone stuck either in the ureters or
intestines to facilitate its passage
into the bladder, or rectum — the
1st cause of the pain — If there be
undoubtedly the employ — with distant —
2 When we are employ a stimulant, if we
give pain — When there is no contra
indicat. to stimulate, may be given
to prevent pain — If the opium can
anodyne the skin to a, to lessen the
pain and — If there be to
of the sensibility of the skin, lessen
less pain & soothes the nerves
altogether — If surgical operat.
is to be performed, opium may be
empl. internally so as to take off
the sense of pain — — When a
painful dis. must go thro' its
natural course — w. greater cause
is not obstructed by opium as when
a phlegm. is going on to suppuration &
progress is not retarded by opium
we may admit the use thereof
the Pat. in some deg. of the pain during
of time that of. Dis. is going thro' its
natl course. 4 Except in those
cases of pain caused by the first
empl. to take off pain —

Lect. 75th

Narcotics cont.

The sleep produced by narcotics is not natural, many of the best of them are dull — the patient sinks into a state of insensibility while the mind is in a state of wandering, and in an infinite variety of dreams, some pleasant and others terrific, according to the nature of the disease — he seems conscious of his situation, but cannot rouse himself — he may be roused for a short time, but he immediately falls into a state of stupor again, and the dreams return again with the same intensity. — In the cases of opium poisoning, persons have been roused from sleep with difficulty, but they have been roused by the pain of the mind, if you can so speak, but they have been unable to keep it up, and they have been in a state of stupor, or sleep, or dreaming, or rather in a state of insensibility — so that when a person in this situation is roused, he is unable to give an account of what he has suffered, or to relieve the pain, and the only step left is to relieve the pain by a stronger one, or to give a stronger pain, so as to make the person forget the pain he suffers — when he is perfectly insensible, in sleep, in stupor, it is rather to be considered as a suspension of the pain — it is a powerful remedy for this purpose in all cases of agony, when the pain is so great, that all other pains are lost in it, or in exquisite, in the

[illegible] not quite so cast down
[illegible] but has not any effect
[illegible] on the mind. — He feels
[illegible] towards God [illegible]
given in large doses alone, and
[illegible] sleep — his first
[illegible] dozes [illegible]
[illegible] repeated even [illegible]
[illegible], it may [illegible]
[illegible] to fall into a [illegible]
[illegible] effect [illegible]
[illegible] passes [illegible]
[illegible] much [illegible]
[illegible] especially when [illegible]
[illegible] immediately [illegible]
[illegible] system [illegible]
[illegible] may be [illegible]
[illegible] sleep [illegible]
[illegible] as an antispasmodic [illegible]
returns of [illegible] — [illegible] has
been [illegible] in the [illegible]
[illegible] to produce more perfect
[illegible] and [illegible] his [illegible]
[illegible] good authority — he
[illegible] himself never saw two adre
[illegible] his mind from [illegible] —
[illegible] the intermittent [illegible]
[illegible] and means of violence
of those [illegible] in making the [illegible]
[illegible] [illegible] [illegible]
[illegible] instead of quiet sleep — [illegible]
[illegible] to the inferior parts of the body
[illegible]

in a state of mania, or of some
delirium — in this, as indeed in
all other cases, if much of sleep is a
def. to be in danger of death
& if we make inq. of persons — it is
a very uncertain in its effects & the
effect is often not also immediate — &
opinions on the effect of opium — the
cases in which it is used for
want of sleep, it is much better to
prescribe in small doses & repeat
them quite & carry sleep gently, and
the effect of the laudanum — the
elem. of det. prod. a still more distrest
state of mind — Opium & laudanum
tartar have been employed with
in this case & in general in the
acute stage of sleep prod. by opium & see
more refreshed — in hyster. cases
& all cases of great mental irritation
prod. quiet & easy sleep — Opium
has also been employed as a sudorific.
The cont. use of prod. at least 20 or
in 3 or 4 years & sweating the
prod. — Opium influence of spirits
with stimulant & relax. doses the
most powerful sudorif. we know.

This may be done by throwing mercury into the system in small stricken quantity &c. so as to end. The sec. for this is by taking the mercury in the second place before the salivat. begins &c. &c.

Lect. 56th Of Evacuants in general.

Evacuation is produced by encreasing the secretion from any of the glands — Some of them [illegible] fluids are no longer taken [illegible] in the system, naturally to be evacuated [illegible] at the kidneys — skin &c. — [illegible] taken upon the intestines [illegible] the [illegible] evacuation — [illegible] the evacuation from the intestines but the [illegible] of the food & the intestinal [illegible] forwarded the digestion — [illegible] [illegible] the [illegible] — [illegible] to be [illegible] in the system [illegible] their ordinary course the [illegible] speed in them the [illegible] evacuation [illegible] the secretion is encreased by a certain [illegible]

[illegible] the fluid secreted is evacuated — How any of the [illegible] the secretion may be encreased we may [illegible] by stimulus — as for instance if a person holds a piece of [illegible] in his mouth the secretion of saliva shall be encreased — Or we may encrease secretion by throwing a [illegible] into the blood vessels so that it shall be secreted by a [illegible] — We may [illegible] stimulus them either by applying stimuli to the secretory ducts [illegible] by throwing them [illegible] blood vessels so that they shall be [illegible] [illegible] we may [illegible] stimulus, a place by throwing a larger [illegible]

and [illegible] Thus if a person shall have stood on a cold floor [illegible] of bl. will [illegible] thrown [illegible]

[illegible] secretion — [illegible]
[illegible] secretory glands [illegible]
[illegible] the skin by excitation [illegible]
[illegible] prod. an and secretion — [illegible]
[illegible] by applying [illegible]
[illegible] the skin itself because it [illegible]
[illegible] it [illegible] as a homogeneous [illegible]
[illegible] this very clear as to the [illegible]
[illegible] of the secret. of glands [illegible]
[illegible] in naturals — these ideas [illegible]
[illegible] to [illegible]
[illegible] thought of gen. [illegible]
an attract. to certain [illegible]
as a magnet has to a [illegible]
so that when a fermentation goes on
[illegible] intestines [illegible] attract [illegible]
This was an idea in [illegible]
[illegible] — [illegible] held in
[illegible] — [illegible] in
modern times. It certainly is not
true; for we know [illegible] such attract
[illegible] — but this idea was
[illegible] of that [illegible] of bodies
[illegible] more fit for [illegible]
[illegible] breathing down of blood & [illegible]
[illegible] — This opinion [illegible]
be in a very [illegible] prevalent
out of all probability — for [illegible]
suppose a man [illegible] [illegible]
from cutting the thumb to [illegible]
[illegible]? and if there were
solid particles found [illegible]
where there [illegible] [illegible]
[illegible] possibly dissolve [illegible]
[illegible] [illegible] [illegible]

à caustic à Ohm.

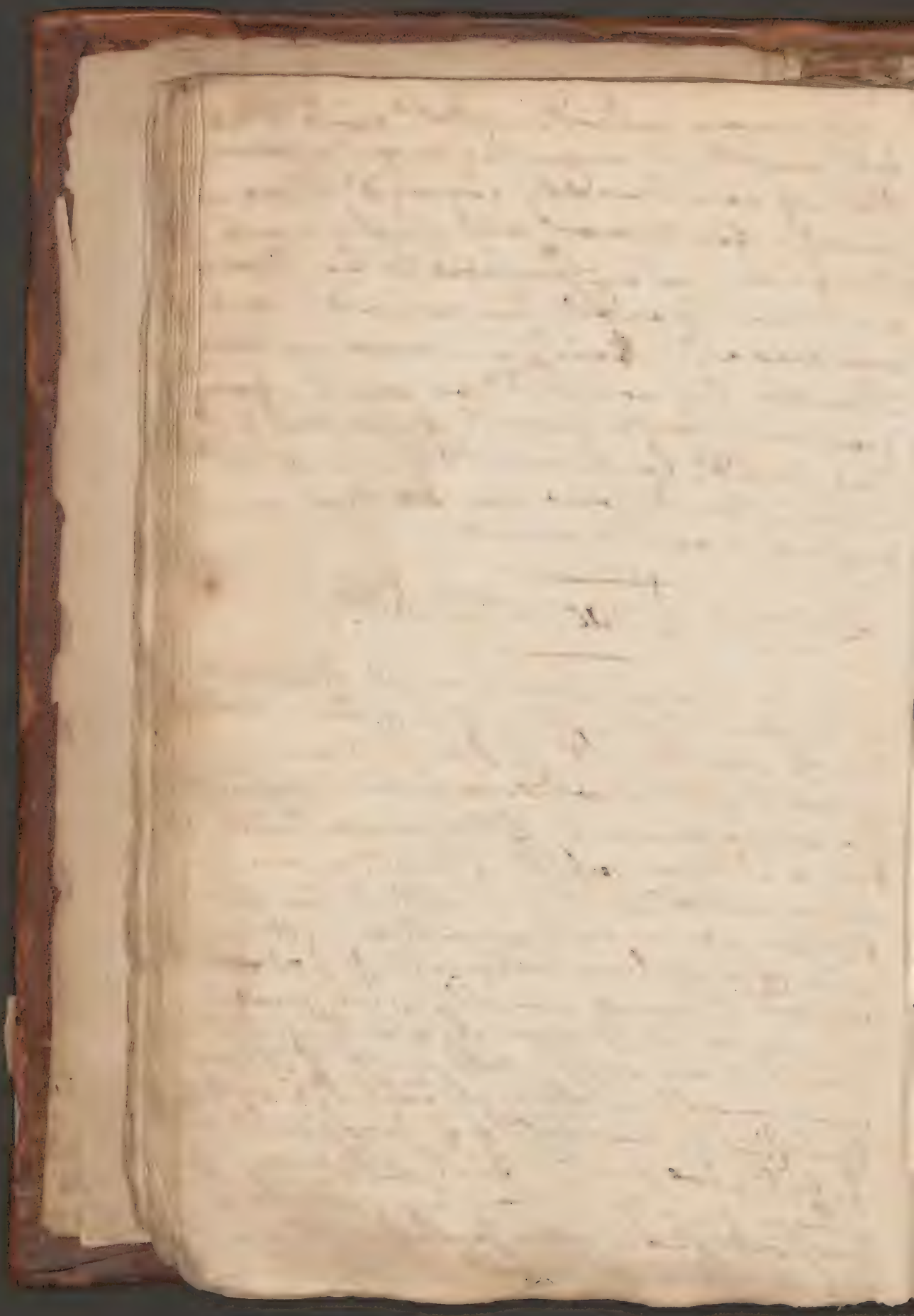
There are 2 circumst.s w.h consider either one or the other absolutely imp.g the pl. There is no mention that we can send into the bl. so that it will not be saturated long before it can reach them — But if a cord into the stone it will be sat. the bl. rises, & that if it must pass through before it can get into the bl. vessels

Moreover if there were any matter stopped in any part the subst. c. one get at the part by injection — If the part be already saturated it could get there at all — There are cases where we know we have not at all why they sh.d take pl. — If we could injection, we sh.d dis positively poison th.m. There was an expectorant — Some coun. the small sec.n w.h happ.s in the lungs, we sh.d consid. it meaning of the quant. of an expectorant & medicine sec. There, so as to prod. any effect — some ... even the highest rank in the College for instance have taken the method of solving this difficy — by saying that there cd be no expectorant at all because it cd not be account.d for — But if an expectorant is necessary

We may introd. subst. into the
cal. mixt. wh. may be wat. again
tho' wh can hardly consid. these
mat. — for throw out what was
supposed in an Impure to be thro
out, can hardly be consid. as
an mat. — Hence in many ca
it may be consid. as such — for
diminishing large quant. of matters
has produced large secret. of mind
have altered some organs so that a
dropsy has been cured —

Evacuants cont.

The 1st obvious principle of mat.
is to clear the system of noxious matt
small ages of mat. it has been
evident that the solids remain nearly
the same, & nearly of the same struct.
Hence it was suppos. that disease arose
some alter. in the prop. of the fluids —
for some not. matter getting
into the system & therefore of principal
remed. it were simple, were mat.
wh were to remove off the diff. cause —
for it was suppos. without doubt there
was not. matter got into the system
but that by variat. of prop. of
the fluids also prod. dis. & that
when one fluid was in greater
proportion than was proper, there
were certain mat. [illegible]



of that — so that there were hydrago-
gues — melancholiagogues &
menagogues — & &c. &c. &c. &
consist of phlegm — bile — black
bile — & blood — The Ancients
had an idea that some of the bodies
was too hot & some too cold — &
that which there was. They
were sedative & stimulant medicines
and cold & heat — The idea
was that the body was sometimes too
dry — sometimes too moist & that it
was therefore proper sometimes to simple
moistening & sometimes to simple
ones & so on. Thus the idea
of the Greek Materia Med. was
indeed antidotes to destroy the
effects of poisons — but their idea
principally was to simply water in order
to get rid either of a superfluous quantity
of any of the particles humours of more
consequence in the body — or any noxious
matter that might get into the system.
This was in a great measure founded
upon rude — — — Now we
know that the blood does not
consist of phlegm — bile — black bile
& blood — but of red particles — serum
coagulable lymph & superfluous water
we see further that it is of no
consequence what proportion the

cut to one another, for we sin
a man in perfect health in
a quantity of coagul. lymph in
a very small vessel & very
particles & serum like thereon
therefore simply must to alter the proportion
of the fluids in the blood vessels —
when there's too large a proportion
of the thinner parts of the fluids and
too? suppose it at least we ought
vacuate there leaving the thickest
ones behind — i.e. that we ought
must a superfluous quantity of water
leaving the red particles & coagul. lymph
behind. But when we perform
any large vacat. if the sudorific
urine or sweat we find that
instead of giving the thinner
parts of the blood we drain the thickest
ones — in this respect we act
to the reverse of what Nature
has approved & prescribe — The fact
is, if the proportion of red part. coagul.
lymph, & serum depend very much
on the action of the vessels — When
they are active & strongly set out the
digest. are in good order & there is
good nutri. then the red part. & coagul.
lymph exist in quantity — On the other
hand, when the dig. are relaxed
& weakly, then flesh & the

superfl. water and. in quan. —
There are clearly no mat. in the urine
made any partial mat.s of any
particular matter in the system — the cases of
the nervous Dept. or [illegible] the particl. [illegible]
matter, for we are hasty of a remedy [illegible]
to destroy it, only [illegible] affected by means
for mercury will cure [illegible]
[illegible] inflammatory [illegible] — where
there is any mor. matter in the
[illegible] in the system [illegible]
[illegible] the whole [illegible]
[illegible] indeed of higher matter [illegible]
the [illegible] part [illegible]
somewhat more readily [illegible]
there are some cases where [illegible]
matter are [illegible] mat. [illegible]
as when ~~part~~ [illegible]
[illegible]
[illegible] the idea of all [illegible]
[illegible] the [illegible]
[illegible] of a system [illegible]
[illegible]
[illegible]
[illegible] they tend to [illegible]
[illegible] occur [illegible]
[illegible] — If there be any
mor. matter in the system, mat. are
little service [illegible]
be an ulcer [illegible] whole [illegible]
because mat. change the whole [illegible]
when any mor. matter is [illegible]
forming [illegible] into [illegible]
~~[illegible]~~ [illegible] are chang. [illegible]
[illegible] become [illegible]
or any other mor. matter is [illegible]
[illegible] the blood ~~[illegible]~~ changing the [illegible]
[illegible] mat. [illegible]
[illegible] mor. matter [illegible]

not, notwithstanding this treatment in any part of the body, must will frequently be absorbed so as to produce an effect — Thus very small bones have been found for several years in a particular part of the body, have been absorbed perhaps in consequence of a stimulus of purgative, & brought into the general system, so as to produce symptoms of the disease —

fin. whence the heat takes place. This
to indeed very much mod. & spec. Than
pen the system gen. — If there be an
nat. matter in the stomach, it may
eliminated thereon and by vomit &c.
out of the intest. by purging & that
some in the cherlong duct. & any
If there be any nat. matter or mat.
is washed away upward & thereon
out of the body — Even in vomit &c.
where nat. matter is formed, as
constg forming in the place, it may
be wh., as in Jaundice. Where spe
ven. matter & constg forming in
the methra, & end. sect. of the Chyme
Cul. in the tubes, all naturally, mucous
it off & that factor then it is forced
so that every particle of it may be
evac., & the Cul. no farther effect, no
more similar matter will be
prod. — a.

Lect. 58th. Evacuants in general cont.

When there's too large a gen.
plood in the tot. syst. for their prod.
Disposit. to contract, and are adm.
ex. — If there be any inc. d.
ring effect arising from a strong
by bleeding is the best rem. to
take it off — but in case of non
inc. d. this will only be disease
the weak by bleeding diminish. the
more quickly — but not so powerful
as d. the vac. — Evac. is com. p.
to weaken the system, to

(a) that is general act —

the action of particular parts — by
carry off of Inflam. — & wear. for it
mustalect. prod. an alter. in the
proportion of the lib. in the dif. parts
of the body — A Lapse quam. that
alter. be made to circulate that the
resp. of those parts for absence of the
mach. commence mach. & circulation
or rest, in particular inflam. of the
inflam. be at a distance & the quam.
of blood is drawn out of that the
coming. then the mach. of the quam.
in carry off of inflam. — & wear. for
land to carry off inflam. for the sol. wear
where the elast. is made to alter
pl. — & wear. lastly a mat. sec.
for inflam. of parts that are inter. mediate
wear. for the pl. are left pancreatic
Cuticles are useful in inflam. of
exterior parts indeed they are mean
powerful — Many part al. of the
lib. inflam. of the intest. are prod.
so contracted ~~Patent wear.~~ that a
cyst. can be made for them gradu
ally are serviceable — In inflam.
of the thorax viscera they are also
for the resp. but prod. wear. for
of the lungs is reduced —
& wear. are employed to promote
absorption, & indeed to promote
chrona. — Pa quam. of lib. in
the pt. pl. is stop. lib. are
of the body, wear. are employed
dent. adhesive to promote
absorption — If there be

quantity of blood which in the brain
lungs may be employed. The advantage
of this is prevent further extravasation
from the absorption of what is effused.
But water are more powerful in
promoting the absorption ~~of the~~
1st of watery fluids than other
spirits do and the principles upon which
of bleeding are simply they produce
little force on the blood vessels
remaining, & of course the fluids find
an easier entrance into the veins
2dly they promote absorption upon
have a tendency to excite gentle
of absorbents — Hence of impor
of sympathy between the general
of the & absorbents of when a contrad
of the & takes place of absorbt. take place
place in order to supply the place in
the bld. vessels — Quadr. for a part
near where there's a disposition to
water is more efficacious part
at a distance as in cases of water
in of brain cavities are found in
great advantage in those of water in
of thorax, expectorants &c — It is
to be observed that at the same
time, if it happens of accession
of watery effusion take place in cavities
immediately — In the case
very weakness of system tend
a fresh disposition take place diuretics
rarely advantage in that case
rather consist of dropsy ascites &c

a Cupping is an exact. wh. takes
off very a very great surface and
perforations prod. a flow of blood
& ~~abdomen~~ whole abdominal
viscera & the eff. diminish the
pain of inflam. internally &
externally by this means they tend to take
off the inf. of the Spleen & in fl.
the peritonal accident ——

tumors pressing on ye. lymphatics
In that case, it is good to use
use to emplyr. leech. For an ani-
-mal of Cat. size more than the
Stomach he cut off — Had shotgun
and for a certain time of
prescribe on the region of ye. liver
occasion the water & tea cure it
is good use to employ water as long
time to weaken & destroy the Cat. sooner
than he wd. otherwise be during life.

Lect. 59th

Of Errhines, Sialogogues, & Expectorants

Errhines are applied to the
the nostrils for nostrils. They are
employed for any purpose to affect
the system generally — They are most
useful in inflm. of the eyes, especially
such as go on for a considerable length
of time — They are also for use
if any insect has got into ye. fauces
intestines, or any of the other cavities
communicating with the nostrils and
they have made passages for
occasion, very mild. Tea, snuff or
other strong pulverized substances
the use of the nostrils, be
equal — for rheumatic pains, about
the head they have been

[illegible] [illegible] with a Drachm of
Salvo a Drachm in cases where the
deposited in the brain — the fine
capillaries intervening powers, is a
very uncertain Dose — in cases
of sudden stupefaction [illegible]
fully in stopping as well as in
other cases of sudden [illegible]
have for example, the Drachm of
whether they arose from [illegible]
the brain or not — the
[illegible] in Dr. Pitcairn's
catalogue are, Ruta, betonica,
[illegible], but the [illegible]
included Lavendula, rosmarinus,
[illegible] more of the fragrant Dittany
[illegible] euphorbium, hellebore
[illegible], iris nostras, nicotiana
[illegible], pepetasum — the
[illegible] are powerful stimulants & should
[illegible] be employed by strangers —
Inspection [illegible] alone
[illegible] — but it [illegible]
can hardly be supposed [illegible]
[illegible] be some of the [illegible] of
rosemary, or some other of the
[illegible] in such quantity as
can easily be borne
Dialogues are such [illegible]
[illegible] of the [illegible]
[illegible] as to [illegible] an effect on the system
[illegible] —

Nitro salin. has sometimes been tried in order to accelt. absorption in dropsy, yet it is not perfectly a mean — this, however, there are some few cases where Cat. has actually cured by compl. of mercury in dropsies, tho' many more have been injured in other things — Some w. can be applied to the mouth, i.e. emetics in G. C., catal. so as to stimulate directly the excretory ducts of the glands, are angelica carm. Ipecac, impratoria nicotiana, pipen, hyscyamus — Acids, same as to be applied, & nitre to be used first — Now they cannot produce such a secretion of glands of the mouth as to be just in effect of system in general — so that the only purpose for w. they can be compl. is in cases of toothach & rheumatic pain about the face — In such cases, galvanism may be a mainly compl. —

Expectorants — It has been a question whether any expectorant remedy exists, i.e. whether it may possible to excite secretion of the glands of lungs. The decision is for the difficulty of applying an expectorant, because cannot be applied immediately to the lungs, except by inhalation

of vapor & there in gen.l are not
many efficac.— An expector.t throw
into the stom.h, cannot immediately
pass to the lungs — but must go
into the int.s & pass thro' the
lacteals into the blood-vessels &
be sec.d by the p.ts of the lungs.
Yours &c. Samuel Stanhope M.D.
Gentlem.n I see by your use of in many
small & specif. there is a very
small chance of any consid.
quantity of expect.t being prod.d — Hence
we should hardly think it worth
while to matter a priori that we could prod.
expect.t — How.r we find it we actually
can in some cases — But it has
been said, that in these cases expect.t
will have taken place if they since the
remed.y we are apt to prescribe expect.t
do not excite cough or spitting of blood
in perfect health — Nevertheless we
find cases of this where there is, and
without expect.t where expect.t comes
on in consequ.ce of cooling. Secondly there seems
to upon it is most probable it would
not if they had not been employed
M. Lee's cloth of expectorants is not a
good one, and at time he made
it he did not believe in expect.t
so that he has blended what are
called pectoral med.s with some very
different from expectorants.

Lance of the Ordinance have been
carried by a strong wind, as the effects of
Gunpowder & Bombs have been found
as such by experiment & the usage
of Green prisoners Gunners when lad'd
in weather red hot to the Cannon, cannot
but be dangerous — Sulphur allum
& many other of the ingredients are
among the most powerful effects of
the Home, and Palliative in Lad & stagna
to be employed when there's reason to
inflam. — Quicksilver, a perfect
& other antiseptic medicines are
right to be made use of
the cons. & dangerous — There are the
principal, which of me are to consider as
effect. & med. of no great dependence
Effect. may be used for any purpose
in the system, merely for a perfect
cure Thus — Many extraneous & malle
rol. get into the Cabinet effect. may prevent
it, by giving repellent Dry so as to be
capable of being spit up — The
many Ways the sea Crew & Sol.
may by accident into the Cabinet of
his, happ. may & then still Cordial
adjoined or of these sh. be Cordial &
effect. blood & chan. in the Cabinet
or & also other extraneous malle
rol. get in, effect. are useful to make
them be thrown up — Effect.
are useful in all inflamat. affect. of
the lungs & of. hearts adjacent to
& necessary, for the cure of cancer
of the mouth by medicines ~~[illegible]~~

& 2d. when there's expectoration, figures
all the same stimulus for the
main effects at exact. for the cough
for otherwise of. cough slime flow.
Expectt. are absorbent, adventy to
encrease of. absorpt. if there be
any orhad. in the thorax —
there be water in the thorax
expectt. are useful to occas. it p.
absorption — there exact.
have but little effect on y. system
generally.

Lect. 60th Of Emetics

Emetics have 2 actions — 1st
they encr. the sec. for the exp. of y.
stom. & frag. of River Sanpea,
& other neighbouring plants & in y.
2d. they reverse the peristal. mot.
of y. stom. & frag. of y. duodenum
demulcent — so as to occas. y. contents
of the stomach to be thrown up
the outst. w. have been empt. as
emetics, have been many cases.
However you will reduce vom.
class to test a few warm water
alone, or an infus. of Chamomile
given to dim. it is found spasm
or cardiac remedies, or bitters
bitter roots — lichens & a thread
with a feather or any thing such may
are cured. as mild remedies of
pard. vomiting, as they occasional

little sickness — but they are so
used for every of the purposes for
which they are employed emetics — and, during
the storm, even if its employ, office
for other purposes has taken place
just prior applied if we exhibit a non
active emetic a large quantity should
have to be brought to bear. Gen. J. Stewart
Sheriff at Mole Sh. be required to
accept warm water & Ipecac.
Letter Charles to the ~~two~~ five days
to be used to take, R. J. Naig
efforts in attempt to vomit —
Med. rest. Do. There are many
cathartics which will vomit, given
in large quantity — Jurpeth root
has been employed as an emetic &
elaterium & several other cathartics
but we reject these as they are
very apt to pass into the intestines
& act as purgatives — Again
mustard, horse radish & others
Red. Dynamics have been employed
to act as emetics, but it is only
where they are wished to act as
stimulants, when it is prescribed
sparingly & in such quan
as not to ~~act as a stimulant~~ act as
emetics — All these classes
then sh. be rejected — Tartar & they are
are gen. so —

Ipecacuanha, root, Dan. Cornus
Florida, is the emetic that gives the
most satisfactory results.

stomach & may, he is open not only
in the practice of Deceit & Fraud, in
only by itself but applied to other
persons their actions as equities
for equities is not so certain &
special in its effect but it proves
a great deal of usefulness & is a powerful
relaxing effects behind — for they
are like the emptying of a bottle
useful also to add a little spice to
increase the body, many of them are
every need of them, it only proves
White Vitriol as a quick acting thing
has to employ in cases of poisons
& is small quite enough in the bottle
& the effect to add some special
& the effect to add some special
& Spirits & Ethers of the alliaceous prod.
a much greater secret for g. pt. of
storm & other when well managed
could exact for g. storm. These are
comp. advantages but then they
also by giving the special to make
some their acting as equities — he
may prod. more it by applg the
equities immediately of storm so
it shall act on it directly — the spec.
if it were indeed only of bl. neg
would be secreted some so as to have
commission for instances of this
nature? ——————

Equities are employed in g. f.
to exact the contents of g. storm
Gamy nor. matters? he would
an Acetic ~~the~~ is advantageous

it happens in the beginning of fevers & other dis.s of a quality of which is in many cases in the stom.h at the time of coming on of the dis.s & it appears of sufficient being so much impair'd as not to be capable of digesting it — Hence in the beginning of such dis.s we ought to attend to clean the stom.h of such matter —

to throw off if not matter immediately. Yet in certain cases it is not proper to employ an emetic for instance a quantity of concentrated sulphuric acid was swallowed it would be dangerous instantly the poison coat of the stomach in this case it would be ~~[illegible]~~ to give an emetic. It would be much better to throw in a large quantity of water to dilute the acid. Other of poisons may be swallowed which are such a nature as immediately to corrode the coats of the stomach if we can prevent the action of an emetic is impossible. If the substance swallowed be not absorbed immediately into the system in this instance where a quantity of acrid is swallowed it is proper to give an emetic and indeed if the poison cannot be prevented from acting by dilution, it will be proper to employ an emetic because it — If a solid substance is swallowed it is evidently necessary to employ an emetic (as vegetables &c) to attempt to throw it out in good condition to prevent further injury. In these cases it is useless to employ an emetic to throw it out or convert the stomach is loaded with a quantity of indigestible matter [illegible]

a brief account of the
means, which have been
the success of a stone to
the kidneys passed into the
bladder of which means the
stimulus of urine in any case
an entire by ones of Regen. sec.
of urine, has been found to be
known up, & invented on such
particular place —

of appetite — In such cases the
stomach may be cleared of such
offending matter by an
emetic — — Emetics not
only thus evacuate, may, not
unfrequently, the stomach but also
a tone of much of the tortuous gan-
chal. or when it is affected by
any spasmod. contr. gen. and
by encreas. the sec. of the bile makes
it flow more freely — By exciting
a peristaltic motion of the tortuous gan-
chal. not only, but by bringing
a relaxation of the whole muscular
fibres and spasmodic contraction
of the so as to carry off jaundice
arising from these causes — It is
also to be observed that vomit. some
times spasmod. contr. of the muscles
of the chol. gives occas. to jaundice
to be read — a Emetics can
hardly be employed to evacuate mat.
matter that is off into the cavity
of the intestines — Vomit. is not
an evacuant we should employ to
evacuate the system but still
is very useful in fl. especially in
internal cases — for at the time
the disease is bread before the
vomit. takes place there is uneasi-
ness — paleness & inactive
tendency in all the intestines
of the body, so that except change
be employed to allay the irritation

(a) Our principal empirics act as relat. after the action of many in proper, universal relat. of the whole system takes place. In what manner & reason is good, but we are ignorant of the action of relat. when the requisite is good, to the entire effect —

of the patient in effect, might properly
so as to cure the disease — the disease
be simple in itself, absent of the disease
& joint more certain than they
may be equally simple in all cases
in itself — As the same inaction to be
effected, having the sickness through
the whole body, they have every
cause of internal injury — but the
are more difficult in latter, and
such experiments as proof of sickness
given are ~~[illegible]~~ in this case ~~as~~
Suspected mind was partly made
use of in this case but it is not
better than another case in this
respect & in other is much
worse, as it is more apt to do
mischief from the nature of the system
Vomit, thus be simple as an
emetic in effect, & yet it
produces effect — and by action it ~~[illegible]~~
produces as well as the mathematical
machines much more significant
even does — that if it is but seldom
it can be used for this purpose
Vomit has also been simple to
shake & agitate the system to remove
as it was supposed to ~~[illegible]~~ —

but this idea of remote obstruct
is very ill-founded, for there is no agitat. produc. in some
st. wd. produce any effect in the
system of blood vessels — The idea
of remote obstruct. in the remote
vess. by any agit. is a very fair one.
For must consid. if a particle of
animal matter obstructing a capill.
vess. must be so effectually obstruct.
any agitation we can give ~~[illegible]~~
by citation of vessels force it forward
in the smallest degree — so that if an
emetic did agitate the body very
considerably it wd produce no good effect
in this way — By prod. vomiting
what is its service. Lect. of effects
of what we have considered in ~~[illegible]~~
Lect. 6th

Of Cathartics

Med. prod. excr. from the intest.
are called in Greek cathartics, & in
Latin purgatives — Both these types
especially of cath. have been ad
sorbed from all exist. whatever from
act of stomach — Which of exist. to the
first is, and many cond. as a
for act. Cathartics, and when
instead Appl. from the st. stom. we
should bring into the rectum & to
colon, clysters

a

[illegible] behind — In the 1st case the [illegible] increase of peristaltic motion [illegible] so as to weaken the motions contained in them, be exact — but only in this case we have such a relaxing but make great use of — are excited into the 2d — the receptacle — but if we [illegible] the peristaltic motion of the intestines, they cannot remain the receptacle — must therefore be [illegible] out of the body — Moreover, if the peristaltic motion will occasion vomiting rather see — it has been [illegible] as a [illegible] of the [illegible] — [illegible] American lie but little in this — and in 2d place cathartics may be used when may expect to see the [illegible] & which it is consequence [illegible] of the matter contained makes the peristaltic motion go on more quickly & exact the place — Again, perhaps may be dire in another [illegible] — There are some [illegible] affect the intestines only without applied to any other part of the body — Their [illegible] of the whole system as well as the intestines — Given me [illegible] of sympathetic [illegible] stomach [illegible] — [illegible] of vomiting [illegible] — [illegible] into the bowels & [illegible]

(a) The Italians had many forms of execution against those who were to be put to death instead of being thrown into the Tarpeian rock, so that capital punishment may be drawn out of the bowels of the criminals, and the glands of the intestines are very numerous & there are some very large ones as the liver & kidneys, so that a very large extent may be produced, great in the blood from the arm other parts of the body. They have been used very in the idea of producing very shattering effects of the spirits this may in some cases be the accident of any of the members of the body, which may be attended with the most dreadful consequences.

some subject to the wear, but the time of action of such shocks, & this cannot be, we can, in no manner, subject thrown into the storm, generally require a shock for thoroughly be absorbed & carried off by the reg. & in lit time, not consequently path. There is consequently path. subject to the cause of storm. Thus the whole intellect comes forward, a prompt act in an emergency. This is exhibited — We may consider it in this case as the act immediately after the rec. in requisite time for it to pass and the detections were eliminated & quite pending — There are only 2 on record where deaths appeared to occurred have passed pending for about once we are led letting go the lady & know more both of what is cont. in the bl. sup. & also of the structure we do not find any redundancy of bile except in cases of jaundice & then is never any blackish bile — It does not follow that the strictly is a remedy merely the official because it was, as it, an a false indication — the Sn. liver is cured by faithful the bl. in order to cure an a. in the it does not alter the course of it cures the intermittent fever

A Page has been made, and stone
Put in a Description of the figures
of quadrupeds, & reptiles, & remains
contains Cut marks, fecu

So we have the reason to believe
that many of those remedies of Ancient
empirics as have, & we have
reason already to believe, the
system greatly based upon the
curing diseases besides their pretended
Great. For it is an error &
also a crime of great consequence
opinion & perhaps — Great if he
supposes it was worthy of
proof. For it was a doctrine
many kinds so as to prove another
better known of the
case because it fully in a sense
to dyspepsia perhaps with more
stall, or prodigious & secondary
Good. Those many kind of imitations
practices of the Ancient physicians
which probably, some other effect, are
entirely fictitious & practice
in fact, have an effect of their
the blood; for the Ancients had
such an imaginary manner of
operation subject in real fact out
of which it was from the
Stone Pyrenaean — for then the
on copper plates by the rules
respiration, & they resemble
a & present it is only in cases
of the Liver Jaundice & the
lungs resp. that we find the
and of any cure, as by the
consultation of the system —

a in the blood vessels —

(b) Excess should remain for any cause, fever, inactivity in consequence of exertion for the intestines — These are the essential matters which is to be regarded — no Compensation belonging to the bodies, but capt. Pulsations, time and other dead quiescent matters — Excellent matters remain in the intestines disorder the whole system theft & such the disorder arising for disease — (sup. in these cases are advantageous

frequent matter is got into the system
we can't say and what from
and nor can we what cause
matter — instead we can't what
subtle it is could found in system
it has to suppose it. Det. to that dis.
if, after they meet off a quantity of
malignant matter off and it is
what, & must have some effect
to cause Diff. what has to called
it. Dress of dis. — Now other good
properties are partly in order as
they often people relapses both
cont. & in intermittent ones, where
there has an absorption of a
quantity of matter, as the pus small-
pox, they may be supp. with good Det.
when there is not matter in the blood
we find are empl. advantageously
what it is. — The causes of the
retention of morbid matter may be
many various — as compression of
rept. of throw out it into the
intestines in det. fortunately. Invariable
reason why that will can, and
a temporary palpitation with rest of the
time 28 appl. forenamed anything
will happen that — From many other
causes also rept. what may not
take place in d. cases, hurt are
useful. — There is one principal
to be observed, viz. that better may
by det. prod. continuance of it is not
critical — The practitioner ought to

a. Whenever there is any doubt and
in needy arising from any blind
matters apply to the intentions of
intent are apt to mend them contents
completely, & of matters of remain
other. Further & very serious respect
if there be any thing of dependence
depending upon the Lawyer part of
the testator are affected with humour
& the general machine of the upper
part goes any more blacker
for them the matters of right
to be made are retained in of
upon part of the intent & become
contrary &c — In this case heirs are
accepted with — Thus shewed such
assented of peristatte instruction of
intent so that of whole contents may
be thrown out. —

(b) When [illegible] is being any of
any repell bleeding is preferable
but the [illegible] part — a bleeding
give a greater respect to of [illegible]
following —

are made in different parts of the country
by which it has been brought to no
more than one in 8 or 10 days —
another singular in this case is,
that such cases are not more frequent
altho' an equal quantity of food has been
made use of — Perhaps there might
be some other method of settling
the matter, it ought to be made to
engage, first, in letters by — whether
acid or any poison, or poison, results
in the intestines altho' there will be
no purging but contingent yet perhaps
may be useful — Perhaps a tube
and a piece of the bile passage
passed forward a stone that might
stick in the duct, come down into
the intestines — or perhaps it might
go into the bladder — when there is to
have a gravel in the bladder
it is not probable immediately
equal upon it, they are equally
advantageous to take it, yet in a
(6) As for medicine we can prove for the
intestines is a very large one and a case
empty the mind of many considerations
this means so as to weaken the
system. Perhaps are simple
advantageous in all cases
by exhausting parts of the body & the
head perhaps may be used with
advantage — They are more remarkable
better adapted to carry off much and
disorder of the system & more —

(a) If it been wh. be impl. & lyle wh.
contin. to flow into the bladder
may be empt. att. pr. pity. They
cannot be used in the Judgment
of entitl. seems? because they
contract, & prevent any thing
passing thro' — But if the p. sick wh.
is contract & pressed wh. be some
time from pure empt. & impl. at the
cost. & mouth — & impt. at the
ureters & bladder wh. are not very
acute & tentatives are pugn. & prest.
service

especially any infl.ce of the Jaundice
and where the accident, as
mad. and convulsions &c. they may be
ampl. with advant. at the beginning to
prevent infl.n — also shew. to prevent
its going on to suppur.n & that even
if the mischief sh. be in the internal
parts of the body, only suppos. from
some mech.l accident — Some
of these infl. are very rich. of
in themselves but at the same time
very apt to terminate in suppur.n &
is also troublesome — & if it sh. be
deep in any of the internal parts, from
fatal. But at especially prevent any
such suppur. the best pl. is frequent
venes. cond. advant. — mingl. of the
thoracic viscera especially when the lungs
is very improper — the infl.s of the
abdomen & those of the [illegible] purpose
is correct. advantageous — but should
~~also~~ equally to that might approach
they have been in [illegible] cases
have fully proved the
prompt. of abstraction [illegible] &
[illegible] — [illegible]
We must observe that [illegible] ind.
is in gen. to be consid. as a sym.
of a dis.e rather than as a principal
dis. itself. for mostly cases
dis. [illegible] are ex. if disperse, &
the sh. [illegible] be abstracted
it will be repeated again — If
[illegible] sh. depend on rheumatism

(2) Whereas he is stayed in any part of his body, first in [illegible] the court [illegible] as [illegible] to [illegible] neighbourhood. - In all plays [illegible] [illegible] at the [illegible] in those cases where we have any reason to believe [illegible] is [illegible] [illegible] [illegible] [illegible]

unless we can [illegible] perfectly the Orbs
of Water carried off by Evaporation
— Hospital Dr. Jenner on
Scirrhus of the liver unless we obtain
the Scirrhosity (wh. we seldom or
never can) the Dropsy wh. he cured
will soon return, and all
the we shall get by Purgatives if
they have made the water be
absorbed, will be to weaken the
Patt., & put an end to his existence
sooner than otherwise he wd. die
of his Disease but very rarely that
purgatives are useful in Dropsy
only where the water is exhaled & the
Dis. gr. upon the vessels of the
Part & the water remaining still occasions
the rest of the weakness — In these
cases purgatives may be useful
in Dropsies sometimes attended with advantage
but in general they are [illegible]
(a) Which bl. is exhaled, & altered
& therefore cannot be reabsorbed with
the rest of the — This true indeed if
the fluid pass off by perspiration absorbed
solids — [illegible]
[illegible] a mass of Ice
[illegible] may perhaps be [illegible]
or 2 in size, that cannot be swallowed
by a pitful of is not of 1000th part of
[illegible] in diameter — nor is a
solid yet [illegible] for it will melt
[illegible] [illegible]
[illegible] Heat [illegible]

be converted into a fluid before it can be absorbed — Bl. Purgatives in general & cathartics must first be converted into a fluid previous to their absorption. But there's a peculiarity in certain solids are converted into fluids after they are in the body much sooner than it can act — Purgatives & cathartics of the body in general proceed so as to make a fluid of them before they come into the sooner as well as making it absorbable sooner. Hence it is the sooner they are taken up — Besides the fluid and the solid of the intestines, the solid & fluid all of a mixture — as for instance & nature — the fluid means the same as to be washed off & have been consd. — Hence the general theory name of neut. terms be washed off sooner than the same it wd be —

Lect. 62. Cathartics cont.

In Dolly's Dr. Catal. in his class we find first Pruna Bigmolensia — Gallice tamarinds — cassia fistularis — These fruits contain a purgative juice & hence in consd. to juice, & the body just spoken in cases where there wanted quick shot for statutency — they rather act as sed. with regard to the rest of the system

2 or when there are hard fæcal matters retained in cases where the intestine is pressed by an tumor or where there is a stricture in the intestines — shall such tax be deemed an expense incl to a person ~~[illegible]~~ at a place certain on the spot

ment are very useful carm.
Liquorice, pas. pane, being of a mild
quality, but when it is rather
astringt. yields to the gentler
lenitives, in the form of the
pure & opinion have been made rather
of the inspissated sugar — Manna
(wh. is sugar dissolved in a small
a tree of Calabria and Sicilia) is
is a very useful lax. in cases where
we wish to avoid stimult. & for children
taste is rejected — We can
usually fl. sometimes to take off
spirits if pure may be required
to pass thro' the prima via — Where
barley-water or any such mucilage
fl. is impl. advantageously for this
purpose where any more stim.
purgative is made use of. In lieu
milk wh. is of most extensive
there's either an acid already found
or a disposition to putrescency, wh. renders
it purgative — but have it conveniently
be employed for this purpose — Castor
oil is hardly purgative in itself
but is usually mixed, wh. the yolk
in cases where there's any
obstinate costiveness, as when
it is from paralytic affection of the intestines
which lead has been supposed to have made
an impression cont. of the intestines
and alum seems effected and
is already mixed with a purgative juice
We may use kind of second wh. the
oil so as to produce the same effect

a bills are made use of in cases
of an insolvent or not. Smaller
debts frequently of a common
kind to defend of interest for of action
of any such matter & therefore ad
vance & connect be employed in expensive
cases with advantage rather to
convert the mind meanwhile than
to act as a bargainer — Mutton,
meat & fish v. beef a cond. of
meat to render applicable are preferr
in this case, & thus so apt to be
absorbed in paying along of interest —

[illegible] uncertain with pers
[illegible] rendered it not useful as a pres

[illegible] Walk are also pres. & of
of same kind but a, they attach
of such alth. they meet with
of body & in consequ. of time of
[illegible] upon meet in large quan
[illegible] prospects be given in
this new — Yes, yes they are more
uncertain in their operat. & tend
[illegible] more for of interests

or a little more rather a
dose is not enough — it may be com-
pared simply as a drug: yet it has a
disagreeable smell & not possess any
particular advantage — The juices of
roses & violets have great power — but
can only be employed for children — for
they are scarcely powerful enough for
adults — They are very useful when
for infants, not having a disagreeable taste.
Sulphur is a very useful laxative
when we cannot employ other medi-
cines. — Many on acc. of their disagree-
able flatulency cannot be employed — nor always
nor the stimulating powers on acc. of their
stimulus in inflaming affection —
It is also used in cases where it is
advantageous in adults to effect important
matters, for therewith they their bowels
they accustom them to such distention, when they
are used as aperients to excite in them
hunger, very much —
Tartar yields a copious product, if
water is used value it than the former
in large quant. so as to act purgative.
(b) It has been employed in same cases of
consti. in preference — but then it has
been rather as a diuretic than a
purgative — In these cases it
cannot depend on it — Neither
to stimulate the glands of the intestines
& prod. spasms, secretion. (c) —
The neutral salts are useful purga-
tives in large quantities, such as
Glauber's salt — soluble tartar
Salt of wormwood — Salt of tartar
Sal. of Rochelle — Salt of an
Sal. of Kochel, have been found

(a) All these salts take up a very large proportion of water in their crystals, & therefore we find, that they are best administered in order to give this proportion dose — These medicinal salts act very quickly — gently — produce a vacuum in the Ch. of the intestines, & rather act as Sed. on the rest of the system, so that they may be much employed & very properly in inflammatory affections.

(b) Rhubarb and the Jurgas (Senna) ground mag.[a] with an Dea of flatul. w.[h] be presented w.[h] w.[ch] is prob. dissolution in the stom.[ch] — but if it is an incomod.[t] it is not left for it was so immediately absorbed by the vessels & stomach & hardly can give any resistance

because they are not such a quick &
fate as Chalybeates salt — but they do
little differ. — this not necessary to give
them in so large quantity (a) — they
are commonly exceptionable, on account
of their being apt to cause costiveness
& sloughs — this is prevented by
joining them with senna in an infusion
or either giving them in a large
quantity of water or drinking a large
quantity of some warm liquor, & by
immediately afterwards, or perhaps in
conjunction therewith, taking some
Pick Epsom & giving in laxative
in shell — but to be taken off in a
gr. quantity by joining some aromatic
& a little tincture of senna — Epsom
salt is a purge very similar to the
neutral salts — it is apt to have
some astringent behind & does not
purge so mildly as the
neutrals — Magnesia is here
cumbrous & should be avoided
Cap. only — this a very useful
Can. when there is any difficulty
~~when there is~~ to eructate
in prima via — or in inpatients,
rather when there is this acidity
when combined with costiveness,
astringent & than when quite pure
but with red. with a very large
tea spoon. warmed &c. given
in large quan., cannot properly be
from disagreeing with the stomach
but it will be detained as long as

when consequents arises for measures
~~[illegible]~~ when in
[illegible]

Places had are specified to prod
the eventual plan, Notes to occas
of Pound masters — When these
Pounds are [illegible] Cattel, or
[illegible] a Law of the Government they
are [illegible] respecting of
[illegible] Praire [illegible]

in too large doses are all so
to determine ~~[illegible]~~ of the
stools ~~[illegible]~~ by the [illegible]
Rhubarb and Rhubarb
of Peristaltic motion so as to be
of consequence but properly speaking
they should not be classed among purgatives
Bile is very much [illegible] to
be a very disagreeable purgative & [illegible]
use — Thus it is in cases of
jaundice & supply the natural bile
but there does not seem to be any
good effect of its product, so that
it is not at all in practice —
Medicines which partake of both
evacuation & purgative are useful
Cat. in cases where there's a
disposition to flatulency & where there's a
flow of the menstrua — or any
contr. or hardness of the pulse
for women where they find themselves
have costiveness & weakness & flatu-
lence are of best Cat. we can employ —
The next class comprehends such as
tend to quicken peristaltic motion of
the intestines — & are useful in constipation
in all cases where we want to
evacuate any things out of the prime
viae — Aloes, & the dry juice of
the aloe, are useful as a Cat. when
there's costiveness from weakness —
as they tend to strengthen the intestines
as well as to keep up the evacuation. Ca.

a The Tartars have no fixed habitations in Winter as they wander about to find food for their cattle, pitch up their tents — cut it in pieces & fix it make holes in it & have it about the necks of their cattle to dry — They will be of Turks — of Russians — Chinese — & call their neighbours in short — Persons from & in China, Tartary, Russia &c. to this country —

b The rhubarb is cultivated here at about a third part more in a dose than 4. w.h we import — but in this respect is equally good.

of air is not much impaired.
Rhubarb, wh. is a root of several species
of Rheum, grows naturally in
Tartary (a) — When the fresh root is
cut, it is of a bright yellow colour
which darkens, & loses its colour — It may
not be observed, that wh. is picked
out in Russia for use, is generally
of wh. metal seem specimens, it is
solid, has no holes in it, & is much
harder & heavier than what we
usually have in this country. — The
seeds of rhubarb have been brought
into this country, where they flourish
flourishes very well — Whether it
be certainly our Rhubarb, or
whether it be the principal kind,
cannot be found — (b) —

In all cases of acute disease where
we wish to take off costiveness
without running a risque of a
large mass of rhubarb is a very
useful cathartic — In regard of
everything else, an unequal quantity
as it tends in this case to have
same deg. of action, & then cease
of greater use — This, to be sure
is all those qualities which tend to make
the purgative system are very
to give rise under further is not
necessary to employ rhubarb in such
large doses as to be productive of this

effect. for it will carry near
twice as much if run fine 30 grs.
as 4 times of quassia but in the
quantity of 2 ℈ it will give a most
violent purge — All these things in the
internal tissues of Peruvian bark
of interest only are lost in produ-
cing effects — about twenty 5 or 6
grains —

Lect. 63. Cathartics cont.

Senna is the leaves of a plant
of the name growing in Syria
& other parts of the Mediterranean
It is a very useful purg. from its
most specific action on the intestinal
tubes & not their peristaltic motion
By itself it is very apt to produce
griping & therefore it is better to join
with it some other purge to counteract this
action on the primae viae — It
gives much better to mix 6 or 12
grains together, than to give any
one of them separately in a
cathartic dose — Jalap has nearly
the same qualities of griping of the
primae viae.

Senna is a purgative of the
same kind but much milder
more than any of them, &
has therefore not so much intro-
duced as a purgative. It is now more
made use of as an intestinal
purgative in a dose of 1 dr. or 2
drs. as the senna leaves

of many other of them, all of
w.h are purgative juices — Gamboge
is very similar to senna in its
action, tho' not quite so specific
a stimul.t to the intest.s — It is many
times used to produce laxation.
Black hellebore was empl.d formerly
as a purg.t in mania — but it is not
now at all in use —
We come next to the purg.t w.h have
a specific stimul.t upon the mucous
membrane principally empl.d by the Ancients —
The most all of them, for the principal
& most useful are brought in
canes from America viz. a species
of convolvulus, called jalap — All
the convolvuli have purg.t juices
in the roots especially — We have
convolvulus Turpethum —
jalapium & scammonium —
Jalap stimul.s the whole system very
much & purg.s mild & kindly —
Turpeth acts as a purgat.t
nearly in the same way
prod.s serious effects on the
intest.s It is given in
inflam.y cases, & also to promote
absorption w.h very good effect —
We have seen it cure the
hydrocephalus — Scammony
is a much more stimul.t & purg.t
some cases stimul.s the
sup.f gro.s & acts, as I am
inclined to think, with a peculiar
power on the liver & is
a kind of an intermittent

(a) The manner of system very much determines men to good repentance effects on infl. of the difficulty if great care has not been taken to rub it down thoroughly so as to divide it —

by means of stimulants relax the system at first, the fit of the latter stage, we have then given a special remedy after the former have ceased its action should be over — This in the 1st stage clears the prime viæ prevents any of their contents have had effect — but at the same time had the bad disadvantage in the system, rendered it much easier to be acted upon, as to produce a second by effect required more to prevent the return of the fever. Now for such a purpose, the purgatives are useful — Quinine has also come to be employed in many cases 1st — Bin of juice of the root of the cornus florida is one of the most useful — A small quantity mixed with the Murias of Mercury — Where we want to promote absorption, mercury with the advantage — — Sol Vanilla is scarcely made use of — nor anthanitta — dulcis — sambucus — nor rhamnus — — There are three or four that clap — We make use of the barks of the mandrake — besides of the sambucus & the rhamnus All these are quite strong purgatives given so as to produce a full effect — but have been employed in dropsical cases, the advantage Dunham says that he found &c

(a) Dictum continet Dies et et desunt to be [illegible]
among preceptives —

[illegible] Part [illegible] cure for
dysentery & [illegible] Dysp. Par. the Red berry
[illegible] by much of Buckthorn
Cortex Frutula has some pt. for made
use of in ~~[illegible]~~ medical
cases & limon catharticum — Chelidonium
majus — ~~[illegible]~~ Gamboge &c.
is to be given of a plant in Sicily and
do. whose Manner of planting &
with this prod. has been empl. as
a lax. Cannot be chew. & women
who cannot be persuaded to swallow
amygned. it has any taste in
it in a large dose — This a very
strong purg. but given in
small quant. (about a grain to
a child & 4 or 5 to an Adult) it is
some pt. an useful lax. —
Mercurials have been used only
in dropsical cases some pt.
The seeds of Nutmegs contain a
large quant. of expressed oil & a purg.
Resin also — This oil has been empl.
as a lax. & pt. the Quant. in cases
of [illegible] already mentioned &
daily laxatives are esteem
Cordials or nutritious [illegible]
[illegible] mass as purg. (a)
Gillibons allows as far as the
description of Ancients like of the Pitu
[illegible] same species then employed
we do — If cannot be pleasant but
is so very strong, cut pt. [illegible] like

(a) Gunpowder was a tame
end, but what species was
varous not —

(b) All these things ye Jesuits do
more harm than good
[illegible] —

(c) Tall Gold & silver are such
[illegible] for that they wd destroy
[illegible] —

(d) They are very uncertain for
[illegible] wipe [illegible] of same ye [illegible]
[illegible] death of [illegible] —

[illegible] Pract.
[illegible] it — but if it is given
in such a quantity as to prevent pung.
it perhaps [illegible] into
convulsions — We shd. therefore consider
it was a dif. plant that produced
emphl. — [illegible] Descrip. of the plant
y. we don't even know what
their barndoor fowls were
or whether or not they had any
rats — (as some of them do see) the
of common things are so uncertain
liable, we cannot expect y. those
foreign plants shd be accurately
for they often grow in countries
at a distance & were imported
as they are now —
Colocynthida is y. fruit of a
gourd, wh. is also a very strong
purg. — in its respect with the
[illegible] — Etelium
wh. is also prepared from one of y.
cucumbitaceae is also a very
strong purg. — These are frequently
made use of except in tropical
cases — Among y. metals
Dr. L. enumr. gold & silver but
they are never used as purg. (as
Mercurial preps. have been used as
purg. &c) — Preps. of antimony &
[illegible] as purg. & perhaps the
[illegible] reject these metals —

Ch. 64. Of Diuretics, Diaphoretics & Sudorifics.

Diuret. are employed as evacuants for the kidneys. They can hardly be expected to evacuate any matter from the system generally but may to force forward some stones & obstructions of the kidneys. They are also useful in evacuating stagnant matter to be evacuated from the lungs or premudrus. They cannot do this, & to excite the system, nor are they indeed of sufficient in influence to affect the kidneys or other excretory organs as far as they are in the case. They have no effect on every obstruction of the kidneys by an any other cause but that which has been stated. Such in either of cutting stone. They are not only very frequently the kind ~~[illegible]~~ left to excite the system, for the reason they are often very complicated in diseased cases. Perhaps if we had diuretics powerful enough we should seldom make use of the knife. Yet there are some things to be observed, which is of in Diet. Dr. Cullen says Lakes pl. 88 of the [illegible] of the quantity of

Prevent the evil, in future
crime, by ~~hygienic~~ ~~taking of~~
the stimulus & thus avoid a repeat
in all cases, where the increase
may be from a frequent bath
is explained by the ~~[illegible]~~
mucus as in gonorrhoea &
catarrhus vesicae & many
other similar affect.

[illegible] As [illegible]
Official cases, undoubtedly are
of the most serious & grave nature
can be produced for — Strange
in a matter of mere so called al-
solute & of matter of honour,
calculated as to make a solemn
rebellion & petitioning [illegible]
strangely & strange where the
little [illegible] to make least at of same
time a [illegible] disposition to such persons
are useful in supplying some [illegible]
forwards —

It is a high opinion [illegible]
so expressed [illegible] large [illegible]
in [illegible] — [illegible]
are certain & official, we [illegible]
offers where the reverse [illegible]
has [illegible] published — but [illegible]
[illegible] for instance we are [illegible]
in a very few [illegible] for handle give
catalogue containing most [illegible]
[illegible] many [illegible] days [illegible]
[illegible] side of [illegible] days [illegible]
is an immense [illegible]

Now we have handed a very
[illegible] has a specific [illegible]
[illegible] and [illegible] and little
[illegible] and [illegible] [illegible]
[illegible] can [illegible] supply [illegible]
[illegible] with [illegible] deal more [illegible]
[illegible] other [illegible] [illegible]
[illegible] of such [illegible] [illegible]
[illegible] of [illegible] [illegible]

as this the best way to comply with
such as principles & accord for
affect of the trust + not by
the habeas corpus means
not to open it into examina
tion cut it transversely into
three pieces — Remove be dry
in at 100 deg — Dry — A great
part will come off — we shall
then see what maps have been
[illegible] before they are dry

+ as if a more suitable part is
also apt to act on y. maps

[illegible]

Thus of plants [illegible]
[illegible] — [illegible] — [illegible]
sylvestris foeniculum — meum —
pimpinella saxifraga — silen
montanum — hyssopum — Some
of these may be [illegible]
as food — as sallads — pot herbs &c.
[illegible]
them — The mustard alkekengi
arnica — arum — asarum — of the
are of a [illegible] class of plants
[illegible] mentioned in [illegible]
not asparagus — gramen — linaria
lithospermum — abrotanum — portulaca
santhus — The next are squills
allium — colchicum [illegible]
of alliaria — squills are among
the most [illegible] what
we [illegible] them [illegible]
[illegible]
[illegible] or [illegible]
more than one in [illegible]
[illegible] — Squills have been
[illegible] a
[illegible] but [illegible]
[illegible] have been [illegible]
[illegible] there is only one [illegible]
[illegible] fresh in [illegible]
[illegible] Italian [illegible]
[illegible] solid [illegible]
[illegible]
[illegible]

a Course Practice have given small
Doses repeated, and indeed any method
of administering the Prod of Hydrargyrum
proper effect
of Ung. Cinereum in large Doses —
ronce, so as not to change Pro-

[illegible] a [illegible] the [illegible]
[illegible] time [illegible] the [illegible]
[illegible] is dissolved and in fermentation
so of the fixed deflogs as it goes
into fermentation. It is absorbed in
greater quantity somewhat from
a general diuretic — a. It is an
powerful diuretic & purgative when
drunk in excess for effects of strong
fixed alkalis called salt. and a diuretic
neutral salts partly upon tongue
called sal diuretic & have been used
as diuretics but are likely no more
to be depended on — the same
or liquid which was once quite in
vogue as a diuretic but it is
seems to have depended on rather
manner of their effects for it
was chiefly used by quacks
acts as a purgative in common
of alm. It consists of bitters aromatics
as the prime alm. — the graphane
of resinous plants — viz. of aloes
prime only act as diuretics but
may be in a larger quantity. Vegetable
fixed alkalis are varied & quickly
as they make of bile
& contribute to excess in the not
to be used by the [illegible] as well as
the chin. — The [illegible]
are, opening a general
[illegible] [illegible] [illegible]

* This has a very violent smell
and a dose of one pint in every
small dose

[illegible]
[illegible] pathos
[illegible] de [illegible]
[illegible] cicuta, [illegible]
[illegible] antiquaque [illegible]
contrayerva, ~~[illegible]~~ serpentaria
[illegible] - guaiacum - sassafras
sarsaparilla &c are [illegible]
in D. C. cat. - These are [illegible]
uncertain - The remains we
may depend upon, are squills,
colchicum - some others of the
same nat. class - & alkalis
The digitalis has lately been introd.
into med. pr. in some cases it
acts as a powerful diuretic - but
it is also apt to prove poisonous
if given in a dose, pr. in these
cases we have had no effect.
We are not therefore justified in
yet having as a diuretic the [illegible]
certain equal powers - [illegible]
[illegible] med. pr. ought to be guarded
[illegible] They do not act immediately - It is
[illegible] pr. we should exhibit them for
[illegible] weeks - Nitrous sometimes
[illegible] before they produce
any effect & yet will prod. a powerful
effect - Whereas on leaving
off them, is, pr. sometimes disappointing
in cases where we wish to give
[illegible] pr. sec. Urine is very small
[illegible] little chance of pr. sec. [illegible]
in that case but of blood [illegible]

a. When mercury is given for
instance to a patient and ulcer
in the mouth & throat ensues
the ulcer, for the cure of the
ulcer, for the proof, or not
of, quicksilver is proof. Wherefore
in question, I reject the evidence
accounts, I reject the evidence
of the accounts, since it is
[illegible] quicksilver, and
[illegible] it is not a
[illegible] Q. E. D.

[illegible] Hopeless
[illegible] pathematic use of [illegible]
[illegible] were obstructed by a stone
in this case has only an effect
[illegible] preliminary prep. but rarely that it is
any cond. thereof. one — Among
other remedies we shd have recourse
other combustibles alk. (sp. nitre) &
spirit. dulcis vs. vomit. acts powerfully as
a diuretic — Mass. emplr.
in obstruct. of urinary passages [illegible]

Diaphoretics, & Sudorifics —

Diaphoret. are used, perhaps, [illegible]
[illegible] and diminish. perspir. [illegible]
we have no remedy wh. will
effect this — The effect then is only
[illegible] wh. produces a moderate degree
of sweating, called diaphoresis. & those
[illegible] produce sweating, are sudorifics
Med. wh. act. powerfully, we
can do it as a common thing, [illegible]
sweating is the effect, it can
not matter by system wou
[illegible] of system itself — handle
[illegible] of system, or external
[illegible] or rather not at all cause
[illegible] sweating, [illegible]
[illegible] & [illegible]
[illegible] sweat, [illegible]
[illegible] in hypo. cases & the

2. It must be remembered that when such a cure is effected, ~~[illegible]~~ a matter lent an [illegible] & vicious nature, as a decomposition wd. take place

3. In vulgar language in this & many other complaints, the skin seems to have been taken for the blood — For when a person has a cutaneous eruption he is said to have a foul state of his blood — if a scaly eruption, to scurvy in his blood &c — but the fact is, that it is the skin wh. is the part affected

can, it exhausts almost as much as purging. 10 g. It is not perspiration sweating has to prevent made use of to the cutaneous emunct.

When any cattle in Jamaica, the scarf-skin dries, & being raised upon blisters of skin to the air. Perhaps parts not of stimul. imp. air shelf-not men in of cutet. floating ex-st. but their fld. dry on of surface grows hard, & stimul. of scarf-skin & shell become hard, & stiff. Now a constt. raphoresis keeps of scarf-skin moist & therefore is very useful in the shel of cutaneous emunct. except when they are accompanied with a defl. of serum & oozing out of watery flds.

The most powerful remedy to prod. sweat is a mixture of opium, and hot stimulating spices or vol. alks. & nitrous spec. or acet. of antimony. One with to keep a constt. moisture, opium spec. & cremor tartar & a small quantity of mercury is the most powerful. It has effected success. emphl. in cutan. emunct. (6)

Finis.

LECT
MAT
MED

BOS